



# DAYANANDA SAGAR UNIVERSITY

## PROCEEDINGS OF BOS MEETING: ACY- 2021-22

- School : School of Engineering
- College : Dayananda Sagar University
- Program/Department : Computer Science & Engineering
- Mode of BOS Held : Online
- Date : 19<sup>th</sup> April 2021
- Venue : Block B, DSU
- Time : 10AM

### • Members Present :

SL. No	Name	Designation & Affiliation	Signature
1	Dr.Sanjay Chitnis	Professor & Chairman, Dept of CS&E Dayananda sagar University	
2	Dr.M N Murty	Professor CS&A, IISc, Bengaluru	
3	Dr. KS Sreedhar	Professor CS&E, Principal, VTU-UBDT College of Engineering, Davangere	
4	Dr.H A Sanjay	Professor & Head, Dept of Information Science & Engineering, Nitte Meenakshi Institute of Technology, Bengaluru	
5	Dr. Nagesh Poojary	Head of Computer Vision Group, Continental Corporation India, Bengaluru	
6	Dr. Bangar M K	Professor & Dean, Research, Dayananda Sagar University	
7	Dr.Jasma B	Associate Professor & In-Charge Chairman Dept. of Computer Science & Technology, DSU	

### • Members Absent :

SL. No	Name	Designation & Affiliation
1	Mr.Rajnijkanth Lal	Solution Director, HCL Technologies, Bengaluru
2	Mr Vishwanath Shastry	Sr.Director, Retail BU-Harman International Samsung Corporation, Bengaluru

3	Dr. Samir Kelekar	Head of Cyber Security, CTO Organization, CISCO, Bengaluru
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• Agenda

SL. No	Particulars
1	Context for new curriculum design: Stakeholder feedback and Management Vision/Strategy
2	Deliberations on the <b>2021-25 CBCS scheme</b> of BTech. CS&E, BTech AI & ML, BTech. Data Science & BTech. Cybersecurity
3	Discussion on the syllabi of <b>2021-25 CBCS scheme of BTech.</b> CS&E, BTech AI & ML, BTech. Data Science & BTech. Cybersecurity and approving the same
4	Deliberations on the <b>2021-23 CBCS scheme</b> of MTech. CS&E
5	Discussion on the syllabi of <b>2021-23 CBCS scheme of MTech.</b> CS&E
6	Overall suggestions and directions, Concluding remarks

• Discussions on Agenda

Agenda	Discussions Brief																								
1	<p>Context for new curriculum design as per the input given by VC, Management, Stakeholder were discussed.</p> <ul style="list-style-type: none"> <li>▪ Introduce liberal studies component 10 courses</li> <li>▪ Introduce special topics</li> <li>▪ First year should be common</li> <li>▪ Less credits during last year to support internships.</li> <li>▪ Non-CS branches to include CS components (Core + CS)</li> <li>▪ 60:40 for continuous assessment &amp; semester end exam.</li> <li>▪ Include hands on components as much as possible (including Maths )</li> <li>▪ Base 100 credits + 20 credits specifications/Minor/Honours.</li> <li>▪ All mandatory courses to have at least 1 credit.</li> </ul>																								
2, 3	<p><b>Discussion on the CBCS scheme for 2021-25 BTech CS&amp;E, BTech AI &amp; ML, BTech. Data Science &amp; BTech. Cybersecurity</b></p> <p style="text-align: center;"><b>Program structure</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sl. No</th> <th>Category</th> <th>current breakup of credits (Total 160)</th> <th>AICTE suggested Breakup of credits (Total 160)</th> <th>No of courses</th> <th>New curriculum breakup of credits (Total 160)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Liberal Studies Courses</td> <td>12</td> <td>12</td> <td>10</td> <td>12 (16-24)</td> </tr> <tr> <td>2</td> <td>Basic Science courses</td> <td>26</td> <td>25</td> <td>8</td> <td>23</td> </tr> <tr> <td>3</td> <td>Engineering Science courses</td> <td>29</td> <td>24</td> <td>8</td> <td>23</td> </tr> </tbody> </table>	Sl. No	Category	current breakup of credits (Total 160)	AICTE suggested Breakup of credits (Total 160)	No of courses	New curriculum breakup of credits (Total 160)	1	Liberal Studies Courses	12	12	10	12 (16-24)	2	Basic Science courses	26	25	8	23	3	Engineering Science courses	29	24	8	23
Sl. No	Category	current breakup of credits (Total 160)	AICTE suggested Breakup of credits (Total 160)	No of courses	New curriculum breakup of credits (Total 160)																				
1	Liberal Studies Courses	12	12	10	12 (16-24)																				
2	Basic Science courses	26	25	8	23																				
3	Engineering Science courses	29	24	8	23																				

Sl. No	Course code	Course Title	SCHEME OF TEACHING				PREREQUISITE	
			L	T	P	C	SEM	COURSE CODE
1	BS	Probability and Statistics	3			3		
2	CS	Relational and NoSQL Databases	3		2	4		
3	CS	Microcontrollers and Embedded Systems	3		2	4		
4	CS	Agile Software Engineering Studio	2		4	4		
5	CS	Data Structures and Applications	3		2	4		
6	CS	Computer Organization	2			2		
7	LS	Management and Entrepreneurship	2			2		
8	LS	Liberal studies - 1	1			1		
<b>Total no of credits</b>						<b>24</b>		

SEMESTER IV								
Sl. No	Course code	Course Title	SCHEME OF TEACHING				PREREQUISITE	
			L	T	P	C	SEM	COURSE CODE
1	BS	Calculus and Numerical Methods	3			3		
2	CS	Machine Learning Studio	2		4	4		
3	CS	Design and Analysis of Algorithms	3		2	4		
4	CS	Web Technologies	1		2	2		
5	CS	Computer Networks	3		2	4		
6	CS	Cybersecurity	2		2	3		
7	CS	Special Topics – 1			4	2		
8	LS	Liberal studies - 2	1			1		
9	LS	Liberal studies: 3	1			1		
<b>Total no of credits</b>						<b>24</b>		

Introducing Studio concept for Agile Software engineering & machine Learning courses

- The concept was highly appreciated by the members and also suggested that studios can be done in lab settings with strong peer interaction and learning
  - Suggested to split Machine learning courses in to multiple courses like Principles of AI, Advanced ML, ML-I, ML-II
- Microcontrollers and Embedded systems course feedback:
- Members suggested to add the topics like Node MCU, their architecture and embedded development platform in module 5
- Computer Networks course feedback:
- Suggested to make Computer Network as independent course without IOT instead of combining both topics as both will have to cover much wider topics.
- Suggested to swap OS and CN as OS course is prerequisite for CN.
- Cybersecurity course feedback:
- Members Suggested to move this course to V semester
- Special Topics course feedback:
- Recommended to make use of PhD scholar to engage this course as Teaching assistant or Invite Alumni from different organisation from Bangalore or outside to engage special topics
  - Recommended to conduct intensive hands-on session with mentoring from experts and resource person is given more flexibility for conduction as well as assessment.

#### 6. V & VI semester

SEMESTER V								
Sl. No	Course code	Course Title	SCHEME OF TEACHING				PREREQUISITE	
			L	T	P	C	SEM	COURSE CODE
1	CS	Operating Systems	3		2	4		
2	CC	Program Specific Core-1: Finite Automata & Formal Languages/ Artificial Intelligence/Data Science/ Cryptography and Network Security	3	1	2	4		
3	CS	Object Oriented Programming	3		2	4		
4	PE	PE-1	3			3		
5	PE	PE-2	3			3		
6	CC	Program Specific Core -2: Full Stack Development/Deep Learning/Deep Learning/ Intro to Ethical Hacking	3		2	4		
7	LS	Liberal studies -4	1			1		
<b>Total no of credits</b>						<b>23</b>		

#### SEMESTER VI

Sl. No	Course code	Course Title	SCHEME OF TEACHING				PREREQUISITE	
			L	T	P	C	SEM	COURSE CODE
1	CS	Application development in the Cloud-studio	2		4	4		
2	CC	Program Specific Core - 3: Compiler Design and System Software/ Big Data Analytics/Big Data Analytics/Cybersecurity with AI	3		2	4		
3	CS	Special Topics -2			4	2		
4	PE	PE-3	3			3		
5	PE	PE-4	3			3		
6	OE	OE-1	3			3		
7	LS	Liberal studies -5	1			1		
8	CC	Program Specific Core – 4: Secure Programming/ Sequence Networks and GAN/Data Visualization/Secure Programming	3		2	4		
<b>Total no of credits</b>						<b>24</b>		

Operating system Course feedback:

- Members recommended to have 3 Hrs lab for OS course
- Members suggested to keep OS in IV semester

FAFL course Feedback:

- Suggested to keep finite automata as a professional course for all branches as it helps many students to take up Gate exam

CDSS Course feedback:

- Suggested to combine FAFL & CDSS course if possible

Application development in the cloud course feedback:

- Members agreed that Application development in Cloud is a good course and not to teach only using the services provided by the cloud but should teach how to create new service
- Recommended to have two physical labs up to 6<sup>th</sup> semester. For other courses where hands-on is very much important can be done in tutorial hour

#### 7. VII & VIII semester

SEMESTER VII								
Sl. No	Course code	Course Title	SCHEME OF TEACHING				PREREQUISITE	
			L	T	P	C	SEM	COURSE CODE
1	PE	PE - 5	2		2	3		
2	Project	Project / Practice School - I			12	6		

3	Seminar	Seminar		I		I		
Total no of credits						10		

SEMESTER VIII								
Sl. No	Course code	Course Title	SCHEME OF TEACHING				PREREQUISITE	
			L	T	P	C	SEM	COURSE CODE
1	PE	PE-6	2		2	3		
2	Project	Project/Project School- II			14	7		
Total no of credits						10		

- Members recommended to focus on continuous assessment and encourage learning beyond the classroom
- Members recommended to ensure that students should get enough time to do all assigned works. This can be done by having sufficient no of courses in each semester (8-9 courses including lab courses)

4,5

**Discussion on the scheme & syllabi of 2021-23 CBCS scheme of MTech. CS&E**

It is a 4 semester program with total **80 credit**

It is mentioned that same scheme and syllabus of 2020-22 also applies to 2021-23 batch

**SEMESTER I:**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR AU	SCHEME OF TEACHING					SCHEME OF EVALUATION	
					L	T	P	S/P	C	CIA	END EXAM
1	202		MATHEMATICAL FOUNDATIONS FOR EMERGING TECHNOLOGIES	CR	03	02	-	-	05	60	40
2			Programming and Algorithms Studio	CR	03	-	04	-	05	60	40
3			DATA SCIENCE	CR	03	-	04	-	05	60	40
4			DEPARTMENT ELECTIVE - I	CR	03	-	02	-	04	60	40
5			DEPARTMENT ELECTIVE - II	CR	03	-	02	-	04	60	40
6			SPECIAL TOPICS-I	CR		-	-	02	01	50	--
<b>GRAND TOTAL = 550</b>					<b>15</b>	<b>02</b>	<b>12</b>	<b>02</b>	<b>24</b>	<b>350</b>	<b>200</b>

**SEMESTER II:**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR AU	SCHEME OF TEACHING					SCHEME OF EVALUATION	
					L	T	P	S/PC	CIA	END EXAM	

1	202		BIG DATA ANALYTICS	CR	03	-	04	-	05	60	40
2			AGILE PROJECT MANAGEMENT & DEVOPS	CR	03	-	04	-	05	60	40
3			CLOUD COMPUTING & APPLICATIONS	CR	03	02	-	-	05	60	40
4			DEPARTMENT ELECTIVE - III	CR	03	-	02	-	04	60	40
5			DEPARTMENT ELECTIVE - IV	CR	03	-	02	-	04	60	40
6			SPECIAL TOPICS-II	CR		-	-	02	01	50	--
<b>GRAND TOTAL = 550</b>					<b>15</b>	<b>02</b>	<b>12</b>	<b>02</b>	<b>24</b>	<b>350</b>	<b>200</b>

### SEMESTER III

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR	SCHEME OF TEACHING					SCHEME OF EVALUATION	
					AU	L	T	P	S/PC	CIA	END
											EXAM
1	202		DEPARTMENT ELECTIVE - V	CR	03	-	02	-	04	60	40
2			DISSERTATION-I (INTERNSHIP PROJECT)	CR	-	-	-	24	12	180	120
<b>GRAND TOTAL = 400</b>					<b>03</b>	<b>-</b>	<b>02</b>	<b>24</b>	<b>16</b>	<b>240</b>	<b>160</b>

### SEMESTER IV

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR	SCHEME OF TEACHING					SCHEME OF EVALUATION	
					AU	L	T	P	S/PC	CIA	END
											EXAM
1	202		DEPARTMENT ELECTIVE - VI	CR	03	-	02	-	04	60	40
2			DISSERTATION-II (INDUSTRY PROJECT)	CR	-	-	-	24	12	180	120
<b>GRAND TOTAL = 400</b>					<b>03</b>	<b>-</b>	<b>02</b>	<b>24</b>	<b>16</b>	<b>240</b>	<b>160</b>

#### • Final Decisions/Resolutions/Recommendations

Agenda	Decisions/Resolutions/Recommendations
2,3,4,5	<ul style="list-style-type: none"> <li>▪ Decision was taken to keep Digital electronics and Logic Design as a separate course in 3<sup>rd</sup> semester instead of combining with Basic Electronics as it has to be taught in-depth</li> <li>▪ Removed 'data centric introduction to computing' and 'how things work' to balance credits for the 2 newly introduced courses</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Added Computational Thinking with python course back as students will not be learning python in first year as data centric introduction to computing course is removed</li> <li>▪ Decision was taken to include 3 open electives instead of 2</li> <li>▪ Decision was taken to make Computer Network as independent course without IOT</li> <li>▪ It was decided to have two physical labs up to 6<sup>th</sup> semester</li> <li>▪ It was decide to keep tutorial hour for those courses which requires working on programming assignments and where hands-on is very much important</li> <li>▪ Finalized syllabus of 3<sup>rd</sup> and 4th semesters with all modifications duly incorporated will be sent to all the members for their consent</li> <li>▪ Decision was taken to have the same scheme and syllabus of MTech CS&amp;E 2020-22 also applies to MTech CS&amp;E 2021-23 batch</li> </ul>
6	BoS members suggestions were discussed and appropriate changes were made

- List of Enclosures based on the Decisions/Resolutions/Recommendations submitted :

Agenda	Particulars
1,2,3,4,5,6	BoS Meeting Invitation

*Sajj R.Ch*  
22/01/21

Signature of Chairman of BOS with Date

**Professor**  
Dept. of Computer Science & Engineering  
School of Engineering  
**Dayananda Sagar University**  
Kudlu Gate, Hosur Main Road,  
Bengaluru



# DAYANANDA SAGAR UNIVERSITY

## PROCEEDINGS OF BOS MEETING

- School : School Of Engineering
- College : Dayananda Sagar University
- Program/Department : B.VoC Computer Engineering & IT Infrastructure/ CSE
- Mode of BOS Held : Online
- Date : 12-04-2021
- Venue : Online
- Time : 11:30AM

### • Members Present :

SL.No	Name	Designation & Affiliation	Signature
1	Dr. Sanjay Chitnis	Professor & Chairman, Dept, of CSE, SoE, DSU.	
2	Prof. Jagadish	Programme Head, NTTF, Bangalore	
3	Mrs.Dharmambal	Programme Head , NTTF, Bangalore	
4	Ms. Karunya	Programme coordinator NTTF, Bangalore	
5	Mr. Raja Sekaran V	Principal, NTTF, Bangalore	
6	Dr. M.K Banga	Dean Research, DSU	
7	Dr. Bondu Venkateswarlu	Associate Professor, CSE Dept, DSU	
8	Dr.Srinivas A	Dean SOE DSU	
9	Mr.Vijay Kumar S	Deputy Director - Training, Placement & Skill Development	

### • Members Absent :

SL.No	Name	Designation & Affiliation
1	Mr. K.S. Franklin	Director - Consulting , Future Frame works, Bangalore
2	Mr. M. Bhagavathi	Ex-GM-Digital & Analytics presales HCL & WIPRO
3	Mrs. Kalpana	COE , General Manager, NTTF Bangalore
4	Prof Anita R	COE DSU
5	Prof Guru Venkatesh	VP - Training and Placement DSU

• Agenda

SL.No	Particulars
1	Review of Scheme & Syllabus for the B.VoC Computer Engineering & IT Infrastructure Program for 5 <sup>th</sup> & 6 <sup>th</sup> Semester for the Academic Year 2021-22.
2	Review of Scheme & Syllabus for the B.VoC Computer Engineering & IT Infrastructure Program for 3 <sup>rd</sup> & 4 <sup>th</sup> Semester for the Academic Year 2021-22.
3	Review of Scheme & Syllabus for the B.VoC Computer Engineering & IT Infrastructure Program for 1 <sup>st</sup> & 2 <sup>nd</sup> Semester for the Academic Year 2021-22

• Discussions on Agenda

Agenda	Discussions Brief
1	Chairman Computer Science & Engineering, DSU, Welcomed the guests. He appreciated the cooperation extended by NTTF for smooth conduct of examinations. Mr. Vijaya Kumar, Deputy Director - Training, Placement & Skill Development, SoE, Introduced the guests
2	The draft syllabi prepared by the Coordinator with the consultation of the NTTF Coordinators, were presented to the committee.

• Final Decisions/Resolutions/Recommendations

Agenda	Decisions/Resolutions/Recommendations										
1	Deliberations were carried out regarding changes to be made in the scheme and syllabus for the academic year 2021-22, B.VoC Computer Engineering & IT Infrastructure. Based on the inputs from NTTF the amendment to the current scheme and syllabus.										
2	Deliberations were carried out regarding changes to be made in the scheme and syllabus for the academic year 2021-22, B.VoC Computer Engineering & IT Infrastructure. Based on the inputs from NTTF the amendment to the current scheme and syllabus.										
<b><u>I SEM - CE &amp; IT</u></b>											
SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	107		Maths-I	CR	3	-	-	-	3	*	***
2	107		English	CR	2	-	-	-	2	*	***

3	107		Applied Science	CR	2	-	-	-	2	*	***
4	107		Algorithm- Problem Solving Techniques & Flow Charts	CR	3	-	-	-	3	*	***
5	107		Basics of Electrical & Electronics	CR	2	-	-	-	2	*	***
6	107		Basics of Electrical & Electronics LAB	CR	-	-	08	-	4	*	***
7	107		Basics Of Computer LAB	CR	-	-	08	-	4	*	***
8	107		PC hardware LAB	CR	-	-	06	-	3	*	***
9	107		HTML & CSS Lab	CR	-	-	10	-	5	*	***
10	107		ELSD	CR	-	-	04	-	2	*	***
					12	-	36	-	30		

**II SEM - CE & IT**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	107		Maths-II	CR	2	-	-	-	2	*	***
2	107		UNIX	CR	2	-	-	-	2	*	***
3	107		Computer Networks -I	CR	2	-	-	-	2	*	***
4	107		C- Programming	CR	2	-	-	-	2	*	***

5	107		Database Management Systems	CR	2	-	-	-	2	*	***
6	107		Applications of Analog & Digital Circuits	CR	2	-	-	-	2	*	***
7	107		Database Lab	CR	-	-	10	-	5	*	***
8	107		C-Programming Lab	CR	-	-	08	-	4	*	***
9	107		Unix Lab	CR	-	-	08	-	4	*	***
10	107		Computer Networks Lab	CR	-	-	10	-	5		
11	107		Customer Service Lab	AU	-	-	-	-	-	*	***
					12	-	36	-	30		

**III SEM - CE & IT**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	107		Data structures with C	CR	2	-	-	-	2	*	***
2	107		OOP'S with C++	CR	2	-	-	-	2	*	***
3	107		Computer Networks-II	CR	2	-	-	-	2	*	***
4	107		Microprocessor & Micro Controller	CR	2	-	-	-	2	*	***
5	107		Operating System	CR	2	-	-	-	2	*	***
6	107		Computer Organization	CR	2	-	-	-	2	*	***
7	107		OOP'S with C++ Lab	CR	-	-	10	-	5	*	***
8	107		Data structures with C Lab	CR	-	-	08	-	4	*	***
9	107		Computer Networks-II Lab	CR	-	-	08	-	4	*	***
10	107		Microprocessor & Micro Controller Lab	CR	-	-	10	-	5	*	***

11	107		Constitution of India and Ethics	AU	-	-	-	-	-	*	***
					12	-	36	-	30		

**IV SEM - CE & IT**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	107		Software Engineering	CR	2	-	-	-	2	*	***
2	107		Java Programming	CR	2	-	-	-	2	*	***
3	107		Windows Server Administration & Linux Server Administration	CR	2	-	-	-	2	*	***
4	107		IoT	CR	2	-	-	-	2	*	***
5	107		Web Programming (JavaScript, Perl, PHP, Python)	CR	2	-	-	-	2	*	***
6	107		Design and Analysis of Algorithms	CR	2	-	-	-	2	*	***
7	107		Web Programming (Java Script, Perl, PHP, Python) Lab	CR	-	-	10	-	5	*	***
8	107		Windows Server Administration & Linux Server Administration LAB	CR	-	-	08	-	4	*	***
9	107		JAVA Programming Lab	CR	-	-	10	-	5	*	***
10	107		IoT Lab	CR	-	-	08	-	4	*	***
11	107		KANNADA KALI - I	AU	-	-	-	-	-	*	***

12 - 36 - 30

V SEM - CE & IT

S L	PROGRA M CODE	COURS E CODE	COURSE TITLE	C R / A U	SCHEME OF TEACHING					PREREQUISIT E	
					L	T	P	S/ P	C	SEM	COURSE CODE
1	107		CLOUD COMPUTING	C R	2	-	-	-	2	*	***
2	107		CYBER SECURITY	C R	2	-	-	-	2	*	***
3	107		SOFTWARE TESTING	C R	2	-	-	-	2	*	***
4	107		ORGANIZATIONAL BEHAVIOUR AND PROJECT MANAGEMENT	C R	2	-	-	-	2	*	***
5	107		ITIL.DEVOPS(TESTING )	C R	2	-	-	-	2	*	***
6	107		EMBEDDED SYSTEMS	C R	2	-	-	-	2	*	***
7	107		AWS CLOUD LAB	C R	-	-	0 8	-	4	*	***
8	107		CYBER SECURITY LAB	C R	-	-	0 8	-	4	*	***
9	107		SOFTWARE TESTING LAB	C R	-	-	0 8	-	4	*	***
1 0	107		DEVEOPS LAB	C R	-	-	0 8	-	4	*	***
1 1	107		DBA LAB	C R	-	-	0 4	-	2	*	***
					1 2	-	3 6	-	3 0		

VI SEM - CE & IT

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	107		Machine Learning	CR	4	-	-	-	4	*	***
2	107		PROJECT (INTERNAL/EXTERNAL)	CR	-	-	-	52	26	*	***
					04	-	-	52	30		

3	Draft Syllabi of 5 <sup>th</sup> and 6 <sup>th</sup> semesters for the academic year 2021-22, B.VoC Computer Engineering & IT Infrastructure were discussed. Modifications suggested were deliberated, incorporated into the syllabus of the course and approved.
4	Draft Syllabi of 3 <sup>rd</sup> and 4 <sup>th</sup> semesters for the academic year 2021-22, B.VoC Computer Engineering & IT Infrastructure were discussed. Modifications suggested were deliberated, incorporated into the syllabus of the course and approved.
5	Draft Syllabi of 1 <sup>st</sup> and 2 <sup>nd</sup> semesters for the academic year 2021-22, B.VoC Computer Engineering & IT Infrastructure were discussed. Modifications suggested were deliberated, incorporated into the syllabus of the course and approved.

- List of Enclosures based on the Decisions/Resolutions/Recommendations submitted :

Agenda	Particulars
1	Proceedings of BOS Meeting
2	scheme and syllabus for the academic year 2020-21, B.VoC Computer Engineering & IT Infrastructure
3	scheme and syllabus for the academic year 2021-22, B.VoC Computer Engineering & IT Infrastructure

*Aj R. a*

Signature of Chairman of BOS with Date

Department of Computer Science & Engineering  
 School of Engineering  
**Ryananda Sagar University**  
 Main Gate, Hosur Main Road,  
 Bengaluru



# DAYANANDA SAGAR UNIVERSITY

## PROCEEDINGS OF BOS MEETING

- School : School Of Engineering
- College : Dayananda Sagar University
- Program/Department : B.VoC IT (Data Analytics)/ CSE
- Mode of BOS Held : Online
- Date : 12-04-2021
- Venue : Online
- Time : 11:30AM

### • Members Present :

SL.No	Name	Designation & Affiliation	Signature
1	Dr. Sanjay Chitnis	Professor & Chairman, Dept, of CSE, SoE, DSU.	
2	Prof. Jagadish	Programme Head, NTTF, Bangalore	
3	Mrs.Dharmambal	Programme Head , NTTF, Bangalore	
4	Ms. Karunya	Programme coordinator NTTF, Bangalore	
5	Mr. Raja Sekaran V	Principal, NTTF, Bangalore	
6	Dr. M.K Banga	Dean Research, DSU	
7	Dr. Bondu Venkateswarlu	Associate Professor, CSE Dept, DSU	
8	Dr.Srinivas A	Dean SOE DSU	
9	Mr.Vijay Kumar S	Deputy Director - Training, Placement & Skill Development	

### • Members Absent :

SL.No	Name	Designation & Affiliation
1	Mr. K.S. Franklin	Director - Consulting , Future Frame works, Bangalore
2	Mr. M. Bhagavathi	Ex-GM-Digital & Analytics presales HCL & WIPRO
3	Mrs. Kalpana	COE , General Manager, NTTF Bangalore
4	Prof Anita R	COE DSU

5	Prof Guru Venkatesh	VP - Training and Placement DSU
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• Agenda

SL.No	Particulars
1	Review of Scheme & Syllabus for the B.VoC IT(Data Analytics) Program for 5 <sup>th</sup> & 6 <sup>th</sup> Semester for the Academic Year 2021-22.
2	Review of Scheme & Syllabus for the B.VoC IT(Data Analytics) Program for 3 <sup>rd</sup> & 4 <sup>th</sup> Semester for the Academic Year 2021-22
3	Review of Scheme & Syllabus for the B.VoC IT(Data Analytics) Program for 1 <sup>st</sup> & 2 <sup>nd</sup> Semester for the Academic Year 2021-22

• Discussions on Agenda

Agenda	Discussions Brief
1	Chairman Computer Science & Engineering, DSU, Welcomed the guests. He appreciated the cooperation extended by NTTF for smooth conduct of examinations. Mr. Vijaya Kumar, Deputy Director - Training, Placement & Skill Development, SoE, Introduced the guests
2	The draft syllabi prepared by the Coordinator with the consultation of the NTTF Coordinators, were presented to the committee.

• Final Decisions/Resolutions/Recommendations

Agenda	Decisions/Resolutions/Recommendations																																																																			
1	Deliberations were carried out regarding changes to be made in the scheme and syllabus for the academic year 2021-22, B.VoC IT (Data Analytics). Based on the inputs from NTTF the amendment to the current scheme and syllabus.																																																																			
2	Deliberations were carried out regarding changes to be made in the scheme and syllabus for the academic year 2021-22, B.VoC IT (Data Analytics). Based on the inputs from NTTF the amendment to the current scheme and syllabus. <b><u>I SEM - IT (Data Analytics)</u></b>																																																																			
	<table border="1"> <thead> <tr> <th rowspan="2">SL</th> <th rowspan="2">PROGRAM CODE</th> <th rowspan="2">COURSE CODE</th> <th rowspan="2">COURSE TITLE</th> <th rowspan="2">CR / AU</th> <th colspan="5">SCHEME OF TEACHING</th> <th colspan="2">PREREQUISITE</th> </tr> <tr> <th>L</th> <th>T</th> <th>P</th> <th>S/P</th> <th>C</th> <th>SEM</th> <th>COURSE CODE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>106</td> <td></td> <td>Mathematics-1</td> <td>CR</td> <td>2</td> <td>-</td> <td>-</td> <td>-</td> <td>2</td> <td>*</td> <td>***</td> </tr> <tr> <td>2</td> <td>106</td> <td></td> <td>English</td> <td>CR</td> <td>3</td> <td>-</td> <td>-</td> <td>-</td> <td>3</td> <td>*</td> <td>***</td> </tr> <tr> <td>3</td> <td>106</td> <td></td> <td>Applied Science</td> <td>CR</td> <td>2</td> <td>-</td> <td>-</td> <td>-</td> <td>2</td> <td>*</td> <td>***</td> </tr> <tr> <td>4</td> <td>106</td> <td></td> <td>ALGORITHM-PROBLEM SOLVING TECHNIQUES &amp;</td> <td>CR</td> <td>2</td> <td>-</td> <td>-</td> <td>-</td> <td>2</td> <td>*</td> <td>***</td> </tr> </tbody> </table>	SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE		L	T	P	S/P	C	SEM	COURSE CODE	1	106		Mathematics-1	CR	2	-	-	-	2	*	***	2	106		English	CR	3	-	-	-	3	*	***	3	106		Applied Science	CR	2	-	-	-	2	*	***	4	106		ALGORITHM-PROBLEM SOLVING TECHNIQUES &	CR	2	-	-	-	2	*	***
SL	PROGRAM CODE						COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE																																																					
		L	T	P	S/P	C				SEM	COURSE CODE																																																									
1	106		Mathematics-1	CR	2	-	-	-	2	*	***																																																									
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3	106		Applied Science	CR	2	-	-	-	2	*	***																																																									
4	106		ALGORITHM-PROBLEM SOLVING TECHNIQUES &	CR	2	-	-	-	2	*	***																																																									

			FLOW CHARTS								
5	106		Basics of Electrical & Electronics	CR	2	-	-	-	2	*	***
6			COMPUTING SYSTEMS	CR	1	-	-	-	1	*	***
7	106		Basics of Electrical & Electronics Lab	CR	-	-	08	-	4	*	***
8	106		OFFICE SOLUTION DEVELOPMENT LAB	CR	-	-	02	-	2	*	***
9	106		Web Programming Lab	CR	-	-	12	-	5	*	***
10	106		C-PROGRAMMING LAB	CR	-	-	10	-	5	*	***
11	106		ELSD	CR	-	-	04	-	2	*	***
					12	-	36	-	30		

### II SEM - IT (Data Analytics)

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	106		PYTHON PROGRAMMING	CR	2	-	-	-	2	*	***
2	106		MATHS-II	CR	2	-	-	-	2	*	***
3	106		SOFTWARE ENGINEERING	CR	2	-	-	-	2	*	***
4	106		DATA STRUCTURES WITH PYTHON	CR	2	-	-	-	2	*	***
5	106		DATABASE DESIGN & DEVELOPMENT	CR	2	-	-	-	2	*	***
6	106		COMPUTER NETWORKS	CR	2	-	-	-	2	*	***
7	106		SQL Lab	CR	-	-	12	-	6	*	***
8	106		DATA STRUCTURES WITH PYTHON LAB	CR	-	-	12	-	6	*	***
9	106		COMPUTER NETWORKS LAB	CR	-	-	12	-	6	*	***
10	106		Customer Service Lab	AU	-	-	-	-	-	*	***

12 - 36 - 30

**III SEM - IT (Data Analytics)**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	106		Oracle	CR	2	-	-	-	2	*	***
2	106		Oop's With C++	CR	2	-	-	-	2	*	***
3	106		Information System Organization	CR	1	-	-	-	1	*	***
4	106		Design Thinking	CR	1	-	-	-	1	*	***
5	106		Artificial Intelligence	CR	2	-	-	-	2	*	***
6	106		Unix	CR	2	-	-	-	2	*	***
7	106		Statistical Foundation Of Data Science & Analytics	CR	2	-	-	-	2	*	***
8	106		Oop's With C++ Lab	CR	-	-	08	-	4	*	***
9	106		Artificial Intelligence Lab	CR	-	-	08	-	4	*	***
10	106		Oracle Lab	CR	-	-	12	-	6	*	***
11	106		Unix Lab	CR	-	-	08	-	4	*	***
			Constitution Of India And Ethics	AU	-	-	-	-	-	*	***
					12	-	36	-	30		

**IV SEM - IT (Data Analytics)**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	106		Dynamic Website	CR	2	-	-	-	2	*	***
2	106		Software Testing	CR	2	-	-	-	2	*	***
3	106		Business Intelligence	CR	2	-	-	-	2	*	***
4	106		Java Programming	CR	2	-	-	-	2	*	***
5	106		Enterprise Applications - Basics Of ERP	CR	2	-	-	-	2	*	***
6	106		Data Handling And	CR	2	-	-	-	2	*	***

			Visualization								
7	106		Java Programming Lab	CR	-	-	10	-	5	*	***
8	106		Software Testing Lab	CR	-	-	10	-	5	*	***
9	106		Dynamic Website Lab	CR	-	-	08	-	4	*	***
10	106		Business Intelligence Lab	CR	-	-	08	-	4	*	***
11	106		Kannada Kali - I	AU	-	-	-	-	-	*	***
					12	-	36	-	30		

**IV SEM - IT (Data Analytics)**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	106		Dynamic Website	CR	2	-	-	-	2	*	***
2	106		Software Testing	CR	2	-	-	-	2	*	***
3	106		Business Intelligence	CR	2	-	-	-	2	*	***
4	106		Java Programming	CR	2	-	-	-	2	*	***
5	106		Enterprise Applications - Basics Of ERP	CR	2	-	-	-	2	*	***
6	106		Data Handling And Visualization	CR	2	-	-	-	2	*	***
7	106		Java Programming Lab	CR	-	-	10	-	5	*	***
8	106		Software Testing Lab	CR	-	-	10	-	5	*	***
9	106		Dynamic Website Lab	CR	-	-	08	-	4	*	***
10	106		Business Intelligence Lab	CR	-	-	08	-	4	*	***
11	106		Kannada Kali - I	AU	-	-	-	-	-	*	***
					12	-	36	-	30		

**VI SEM - IT (Data Analytics)**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	106		Machine Learning	CR	4	-	-	-	4	*	***

	2	106		PROJECT (INTERNAL/EXTERNAL)	CR	-	-	-	52	26	.	...
						04	-	-	52	30		
3	Deliberations were carried out regarding changes to be made in the scheme and syllabus for the academic year 2021-22, B.VoC IT (Data Analytics). Based on the inputs from NTTF the amendment to the current scheme and syllabus.											
4	Draft Syllabi of 5 <sup>th</sup> and 6 <sup>th</sup> semesters for the academic year 2021-22, B.VoC IT (Data Analytics) were discussed. Modifications suggested were deliberated, incorporated into the syllabus of the course and approved.											
5	Draft Syllabi of 3 <sup>rd</sup> and 4 <sup>th</sup> semesters for the academic year 2021-22, B.VoC IT (Data Analytics) were discussed. Modifications suggested were deliberated, incorporated into the syllabus of the course and approved.											
6	Draft Syllabi of 1 <sup>st</sup> and 2 <sup>nd</sup> semesters for the academic year 2021-22, B.VoC IT (Data Analytics) were discussed. Modifications suggested were deliberated, incorporated into the syllabus of the course and approved.											

- List of Enclosures based on the Decisions/Resolutions/Recommendations submitted :

Agenda	Particulars
1	Proceedings of BOS Meeting
2	Scheme and syllabus for the academic year 2019-20, B.VoC IT (Data Analytics)
3	scheme and syllabus for the academic year 2020-21, B.VoC IT (Data Analytics)
4	scheme and syllabus for the academic year 2021-22, B.VoC IT (Data Analytics)

*A. R. S.*

Signature of Chairman of BOS with Date

Dept. of Computer Science & Engineering  
School of Engineering  
**Dayananda Sagar University**  
Kudlu Gate, Hosur Main Road,  
Bengaluru



# DAYANANDA SAGAR UNIVERSITY

<b>PROCEEDINGS OF BoS MEETING</b>	
• School	: School of Engineering
• Program/Department	: B.Tech. / Computer Science & Technology
• Mode of BOS Held	: Online (Email)
• Date	: April 21, 2021

## External Members Present:

SL. No	Name	Designation & Affiliation
1.	Mr. Neerav Joshipura	Information Excellence Group
2.	Mr. Ishwar Sundararaman	Serial Entrepreneur, IIMB Alumnus
3.	Dr. Manjunath TN	Profesor and Dean – External Relation, BMSIT
4.	Mr. NC Sriraman	Co-Founder, MD Metaphoric Networks Pvt. Ltd.

## External Members Absent:

SL. No	Name	Designation & Affiliation
1.	Mr. Aravind Sitaram	Ex CISCO India Head
2.	Mr. DB Venkatesh	Cofounder & CEO, JV Technologies

## Agenda

SL. No.	Particulars
1	Proposed Tracks - Innovation and Intrapreneurship & Technology Entrepreneurship (Updated) - The tracks begin from third semester onwards from 2020 onwards. This is because, 2018-19 batch students who started their Startup journey in third semester were able to make some progress on their Startup during their sixth semester.
2	Technology Verticals - No modifications. Same syllabus will be followed as that proposed for 2019-20 curriculum.
3	CST Exclusive Courses (Including Liberal Studies) - revamped fully as per NEP 2020 guidelines and program structure which includes Choice Based Credit System (CBCS) / elective course system (ECS) implementation details.

**Discussions on Agenda** – Proposed Tracks - Innovation and Intrapreneurship & Technology Entrepreneurship (Updated) - The tracks begin from third semester onwards from 2020 onwards. This is because, 2018-19 batch students who started their Startup journey in third semester were able to make some progress on their Startup during their sixth semester. NEP 2020 guidelines including Choice Based Credit System (CBCS) / elective course system (ECS) implementation details.

## Final Decisions/Resolutions/Recommendations -

Agenda	Decisions/Resolutions/Recommendations
1	CST will branch out in 3 <sup>rd</sup> semester from 2020-21 - <b>Accepted</b>
2	Implementation of NEP guidelines includes program structure and new elective subjects - <b>Accepted</b>

## List of Enclosures based on the Decisions/Resolutions/Recommendations submitted:

Agenda	Particulars
1	Mr. Neerav Joshipura
2	Mr. Ishwar Sundararaman
3	Dr. Manjunath TN
4	Mr. NC Sriraman

  
Signature of Chairman of BOS with Date

## BoS Meet for Dept. of CST, Dayananda Sagar University: Request dated 21st April 2021

Chairman-CST <chairman-ct@dsu.edu.in>

Wed, Apr 21, 2021 at 5:59 PM

To: Neerav Joshipura <n\_k\_joshipura@hotmail.com>, Aravind Sitaraman <aravind\_sitaraman@yahoo.com>, NC Sriraman <ncsriraman@gmail.com>, Ishwar Sundararaman <ishwar@unsolved.xyz>, venkatesh.db@jvtechnologies.co.in, manju.tn@bmsit.in, Nagaraj Kulkarni <nagaraj.kulkarni@compegence.com>, H P Khincha <hpk1598@gmail.com>, "Dr.A.Srinivas Dayananda Sagar University" <dean-engg@dsu.edu.in>, Dean Research <dean-research@dsu.edu.in>, Chairman CSE <chairman-cse@dsu.edu.in>, Chairman Physics <chairman-phy@dsu.edu.in>, prof vkm <profvkm@dsu.edu.in>, Prof Aravind Srinivas <aravind.srinikoppa@dsu.edu.in>, vinykani.kumar@gmail.com, Vinod S <svinod3@gmail.com>, Janardhan Dsi <Janardhan.dsi@gmail.com>  
Cc: Kavya Also <kavya-ct@dsu.edu.in>, Ramandeep Kaur <ramandeep-ct@dsu.edu.in>, Jyoti Angadi Angadi <jyotiangadi-ct@dsu.edu.in>

Dear CST-BoS Members & Special Invitees,

Greetings of the day!

I hope you are all keeping well and safe. I pray that we get through these challenging days!

The following are the updates from CST Dept. on Student Startup Activities:

Batch: 2018-19 (current 6th semester students)

Sl. No.	Startup Name	URL	Started In (Month/Year)	Revenue (Approx.)	Company Registration	Incubated?
1.	Growmmerce & Wpify	<a href="https://growmmerce.com/">https://growmmerce.com/</a> <a href="https://wpify.tech/">https://wpify.tech/</a>	August 2020 August 2019	INR 14,00,000/-	-	AIC-DSU  (Enclosed - Sample Incubation Offer Letter to Students)
2.	Rentashoot	<a href="https://rentashoot.com/">https://rentashoot.com/</a>	January 2020	INR 1,20,000/-		
3.	Speckless	-	February 2021		Process Initiated,	
4.	FCON	-	August 2020	-	Awaiting Approval	
5.	Talent Tango	<a href="https://www.talanttango.org/">https://www.talanttango.org/</a>	October 2020		-	
6.	Unpirate	-	September 2020	-	-	

I have received instructions from the honorable Vice Chancellor sir to update the CST curriculum incorporating [NEP 2020](#) guidelines for higher education.

The following documents are attached for your kind review and critical comments for B.Tech. in Computer Science & Technology for batches 2020-21 and 2021-22 from semester III - VIII.

- (a) Proposed Modified Scheme  
(b) Syllabus of

- Proposed Tracks - Innovation and Intrapreneurship & Technology Entrepreneurship (Updated) - The tracks begin from third semester onwards instead of fifth semester as indicated in the previous 2020-21 CST curriculum. This is because, 2018-19 batch students who started their Startup journey in third semester were able to make some progress on their Startup during their sixth semester.
- Technology Verticals - No modifications
- CST Exclusive Courses (Including Liberal Studies) - revamped fully as per NEP 2020 guidelines. Program structure which includes the credits and the elective offering during the upcoming academic year

Due to the pandemic second wave & as no in-person meetings will be held, I request your kind inputs via email on the attached documents. If you need any clarifications, I will be happy to provide you through a telecom (or) Google Meet. If you have any additions/modifications, I will be happy to discuss over the Google Meet & incorporate.

Program structure I have listed and attached for your reference.

I Sem				II Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21EN1101	LINEAR ALGEBRA AND CALCULUS	4	BSC	21EN1201	TRANSFORMS AND DIFFERENTIAL EQUATIONS	4	BSC
21EN1108	ENGINEERING PHYSICS	4	BSC	21EN1102	ENGINEERING CHEMISTRY	4	BSC
21EN1109	BASIC ELECTRONICS	4	ESC	21EN1103	BASIC ELECTRICAL ENGINEERING	3	ESC
21EN1110	ENGINEERING GRAPHICS AND DESIGN	3	ESC	21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	3	ESC
21EN1111	ENGINEERING MECHANICS	2	ESC	21EN1105	FUNDAMENTALS OF PROGRAMMING	5	ESC
21EN1112	BIOLOGICAL SCIENCES	2	AEC	21EN1106	ENVIRONMENTAL SCIENCES	2	AEC
21EN1113	TECHNICAL COMMUNICATION	2	HSMC	21EN1107 K	KANNADA KALI/MANASU	1	HSMC
21EN1114	DESIGN THINKING	1	ESC				
21AU0004	CONSTITUTION OF INDIA AND ETHICS	-	HSMC				
	<b>TOTAL</b>	<b>22</b>			<b>TOTAL</b>	<b>22</b>	
III Sem				IV Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21CS2301	DISCRETE MATHEMATICAL STRUCTURES	3	BSC	21CS2401	PROBABILITY AND STATISTICS	3	BSS
21CS2302	DATA STRUCTURES	3	PCC	21CS2402	DESIGN AND ANALYSIS OF ALGORITHMS	3	PCC
21CS2303	DIGITAL ELECTRONICS & LOGIC DESIGN	3	PCC	21CS2403	PRINCIPLES OF MICROPROCESSORS AND COMPUTER ORGANIZATION	4	PCC
21CS2304	FULL STACK DEVELOPMENT	3	PCC	21CS2404	FINITE AUTOMATA & FORMAL LANGUAGES	4	PCC
21CS2305	COMPUTATIONAL THINKING WITH PYTHON	3	PCC	21CS2405	SOFTWARE ENGINEERING AND PROJECT MANAGEMENT	3	PCC
21CS2306	INTRODUCTION TO NETWORKS & CYBERSECURITY	3	PCC	21CS2406	LINUX PROGRAMMING & SCRIPTING	3	PCC
21CS2307	DATA STRUCTURES LAB	1	PCC	21CS2407	DAA LAB	1	PCC
21CS2308	DELD Lab	1	PCC	21CS2408	MICROPROCESSORS LABORATORY	1	PCC
21CT2301/21CT2302	DESIGN TECHNOLOGY/INNOVATIVE BUSINESSES & BREAKTHROUGH TECHNOLOGIES	2	PCC	21CT2401	SMALL E-BUSINESS LAUNCH	2	PCC
21CS2310	LIBERAL STUDIES-I	1	AEC	21CS2410	LIBERAL STUDIES – II	1	AEC
	<b>TOTAL</b>	<b>23</b>			<b>TOTAL</b>	<b>25</b>	

V Sem				VI Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21CS3501	DATABASE MANAGEMENT SYSTEMS	3	PCC	21CS3601	COMPILER DESIGN AND SYSTEM SOFTWARE	4	PCC
21CS3502	OPERATING SYSTEMS	4	PCC	21CS3602	COMPUTER NETWORKS	4	PCC
21CS3503	MACHINE LEARNING	4	PCC	21CS3603	CLOUD COMPUTING	3	PCC
21CT3501	PRODUCT DESIGN & DEVELOPMENT	3	PCC	21CT3601	LEAN STARTUP METHODOLOGY	2	PCC
21CT35XX	TECHNOLOGY ELECTIVE-I	3	PEC	21CT36XX	TECHNOLOGY ELECTIVE – II	3	PEC
21OE00XX	OPEN ELECTIVE-I	3	OEC	21CT3602	SPECIAL TOPICS-I	1	PCC
21CS3504	DATA MANAGEMENT SYSTEMS LABORATORY	1	PCC	21OE00XX	OPEN ELECTIVES -II	3	OEC
21CS3505	OPERATING SYSTEMS LABORATORY	1	PCC	21CS3604	COMPILER DESIGN AND SYSTEM SOFTWARE LAB	1	PCC
21CT3502	MOOC	2	PCC	21CS3605	COMPUTER NETWORKS LAB	1	PCC
	<b>TOTAL</b>	<b>24</b>			<b>TOTAL</b>	<b>22</b>	
II Sem				VIII Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21CT4701/21CS4702	TECHNOLOGY STRATEGY/ IPR & ART OF RAISING CAPITAL	3	PCC	21CT48XX	TECHNOLOGY ELECTIVE - IV	2	PEC
21CST4703	BIG DATA ANALYSIS AND DEEP LEARNING	3	PCC	21CT4801/21CT4802	PROJECT PHASE-II/VENTURE	6	PROJ
21CT47XX	TECHNOLOGY ELECTIVE - III	3	PEC	21CT4803	INTERNSHIP	2	INT
21OE00XX	OPEN ELECTIVE -III	3	OEC				
21CT4704	PROJECT PHASE-I	2	PROJ				
	<b>TOTAL</b>	<b>14</b>			<b>TOTAL</b>	<b>10</b>	

I will call you to get your kind available date & time to convene the CST-BoS over Google Meet.








Thanking you with best regards,  
Jasma Balasangameshwara  
Associate Professor & In-Charge Chairman  
Dept. of Computer Science & Technology  
School of Engineering  
Dayananda Sagar University  
Bengaluru - 560068  
Mobile Number: 9886019686

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Regards,  
Chairman-CST

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**7 attachments**

-  **CST\_2020-2021-Scheme-4APR21.pdf**  
469K
-  **CST\_2020-2021-Technology Verticals-Syllabus-4APR21.pdf**  
658K
-  **CST-Exclusive\_2020-2021-Syllabus-4APR21.pdf**  
450K
-  **CST\_2020-2021-Technology Entrepreneurship Track-Syllabus-4APR21.pdf**  
359K
-  **CST\_2020-2021-Innovation and Intrapreneurship Track-Syllabus-4APR21.pdf**  
528K
-  **Sample - Talent Tango - AIC-DSU Incubation - Offer Letter.pdf**  
226K
-  **Program Structure .xlsx**  
74K



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## BoS Meet for Dept. of CST, Dayananda Sagar University: Request dated 21st April 2021

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neerav@softnenterprise.com <neerav@softnenterprise.com>

Mon, May 3, 2021 at 10:39 AM

To: Chairman-CST <chairman-ct@dsu.edu.in>, jasma.b-ct@dsu.edu.in

Hello

Greetings!

Many thanks for your mail. My apology for delay in responding to the mail as it seems to have gone to spam folder. I am fine and hope you too are not touched by pandemic.

I congratulate to DSU leadership and students behind of the referred start-ups.

It is indeed interesting to go through the doc and provide inputs. Here is my thought process about the curriculum docs sent.

“Innovation & Intrapreneurship Track “

- I suggest when we talk of innovation, we need to make it clear to students that there are some challenges involved in innovation (e.g. convincing all stake holders, cost/benefits, change management process itself, timeliness of this innovation etc.). This can be managed by 1 or 2 sessions on Change Management and Management of Technology Implementation.
- Page 10 of 18 - Project Deliverable-1 Solution – Can we have some better example?
- [W.r.to](#) Digital Marketing course – My experience is – B-schools go deep into Marketing first even at UG levels and then this topic is introduced. Students must in no way construe that Digital Marketing is THE marketing. Branding, advertisement, awareness creation, communication, product / service positioning, channels & network etc. are other pillars of marketing. So, before jumping onto Digital marketing, it is better that students know something about these components. Also there is difference in digital marketing when it comes to corporate marketing and consumer marketing (i.e. B2B v/s B2C).
- [W.r.to](#) Technology strategy – Management's view of technology need to be captured. Measuring Return on Investment (RoI) is important. While implementing Technology in (or for) a business, one cannot ignore employees, process, transparency, infrastructure, training and regular upkeep of technology. Many corporates who embraced technology early are finding difficult to strike balance between old & new technologies. The management strategy and regulatory framework are important factors in tech strategy. At students' level, they must have some basic knowledge about both, if not detailed.
- [w.r.to](#) Technology strategy, with little stretch, we can cover implementation of Digital technology along with IT. Not sure whether Module 5 IT strategy addresses the above point.

### On Technology Entrepreneurship Track

- Can it be a good idea to make students aware of the reasons why start up mortality rate is higher? Is it possible to identify some startups that have closed the shop and help with analysis of failure?
- Given that technology has penetrated in all the spheres of life, it impacts every business vertical. In the given document, it seems that the entry on this Track is from Tech side (i.e. Tech innovation, new technology etc.) Can this track have another entry point (i.e. problem each & every vertical is facing that can be addressed by existing or new technology or diff implementation)?
- I feel that technology entrepreneurship should have stronger technology focus and lesser focus on Financials. If you have right tech or tech innovation, financial aspects can be taught later too. But knowing financial aspects or valuation does not assure anything. The document is silent on what students would be able to do after this course.
- [w.r.to](#) Program structure provided for the upcoming semester looks fine with the credits for each course and elective list offering for the students looks fine.

### General – :

(1) We have seen unfortunate trends during recent times – i.e. to generate a business opportunity on people's distress. This is negative, short-sighted poor strategy. I am not sure whether it is captured in any courses pertaining to entrepreneurship but following values need to be inculcated somehow in the students

(a) Long term positive thinking and open-minded thinking

(b) Building a value (or solving a problem) for society or nation before building value for self

(c) ethical and responsible social, financial and personal behaviour as good entrepreneur

(2) Not sure whether long term benefits of entrepreneurship to individual, family, community and nation are addressed. If not, it is advisable to include them. We can start with Capitalist v/s socialist concept and cover up to developing entrepreneurial ecosystem

(3) Govt of India is encouraging 'Make in India and Make for World'. Introduction to this broader vision can be brought in into the course, if not already there.

Please do revert for clarification.

Thanks and Best Regards

Neerav

Neerav Joshipura

Founder Director

SoftN Enterprises

[neerav@softnenterprise.com](mailto:neerav@softnenterprise.com)

[www.softnenterprise.com](http://www.softnenterprise.com)

Ph. 998 000 5198 / 78925 86612

[Quoted text hidden]



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## BoS Meet for Dept. of CST, Dayananda Sagar University: Request dated 21st April 2021

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Dr.Manjunath T N ISE <manju.tn@bmsit.in>  
To: Chairman-CST <chairman-ct@dsu.edu.in>

Thu, May 6, 2021 at 8:19 PM

Dear Chairman-CST,

Good Evening.

The Proposed Tracks - Innovation and Intrapreneurship & Technology Entrepreneurship (Updated) and program structure is well designed.

But one suggestion can be to introduce subjects related to **funding mechanism and finance management**, which i am not seeing anywhere in the scheme.

Pls let us know for any further clarifications.

[Quoted text hidden]

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**Dr.Manjunath T N**  
**Professor, Dept of ISE**  
**BMS Institute of Technology and Management, Bengaluru**  
**Mob: +91-9900130748**

### **VISION:**

**Emerge as centre of learning in the field of information science & engineering with technical competency to serve the society.**

### **MISSION:**

**To provide excellent learning environment through balanced curriculum, Best teaching methods, innovation, mentoring and industry institute interaction.**

**"I Touch the Future, I Teach"**

**"Success doesn't just come and find you, you have to go out and get it "**



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## BoS Meet for Dept. of CST, Dayananda Sagar University: Request dated 21st April 2021

---

NC Sriraman <ncsriraman@gmail.com>

Thu, Apr 22, 2021 at 9:56 PM

To: Chairman-CST <chairman-ct@dsu.edu.in>

Excellent progress on start up initiative by our students.

Please ask them to take my help We can have a GMEET call and meet the students. I can mentor them on all aspects if they need. Also we should start conducting review of the their projects once in 3 months. I can send the template which can be used for the business review and help them to do midcourse corrections if needed I will review other details and revert back to you asap

Regards

NC Sriraman

[Quoted text hidden]



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## BoS Meet for Dept. of CST, Dayananda Sagar University: Request dated 21st April 2021

---

Ishwar Sundararaman <ishwar@unsolved.xyz>  
To: Chairman-CST <chairman-ct@dsu.edu.in>

Mon, May 10, 2021 at 1:32 PM

Dear Sir

Thank you for your email. I think the curriculum is very well thought out. If I have to suggest an addition, I would suggest a greater focus on customer acquisition because most entrepreneurs struggle with that piece. Aspects like positioning, communication, marketing automation, product-led growth vs sales led growth etc.

On Wed, Apr 21, 2021 at 6:00 PM Chairman-CST <chairman-ct@dsu.edu.in> wrote:

[Quoted text hidden]



# DAYANANDA SAGAR UNIVERSITY

## SCHOOL OF ENGINEERING

### DEPARTMENT OF AEROSPACE ENGINEERING

#### BOS - Minutes of Meeting

28/05/2022

- Manufacturing lab is made a part of Composite lab where 3-d printing will be introduced.
- Members suggested to include metal 3d printing as a part of the syllabus or the department should plan an industrial visit to NAL composite section or other composite industries to enhance student's knowledge.
- Basics of Material Properties should be included in mechanics of solids
- **Composite theories of Failure** should be introduced in the syllabus of Aerospace Materials.
- Discussions on **Tech pub Syllabus** and the percentage of **airworthiness concept in each module**
- **Airworthiness** can also be introduced as an elective course.
- Discussion made on introduction of Propulsion lab to IV semester and Avionics (lab and theory course) to V semester students of 2020 batch
- As a part of Avionics lab satellite communication systems can be upgraded to communicate with a real time satellite
- Principles of Management and Economics course will be introduced in VII semester for 2020 batch students
- Avionics lab is introduced to VII semester students (2019batch) in place of AI & ML lab
- Second module of Aircraft Systems and Instrumentation can be considered for Aircraft Design

- Research Methodology can be floated as an elective since it will be helpful for students aspiring for Higher education
- General name can be considered for the M. Tech program on Defence and Technology
- Electives on specific vertical will make students to get specialized in his/her field of interest
- Discussions on **Drone and AR VR labs**
- Approval of Introduction of Space Technology syllabus
- Proposed syllabus on Orbital Mechanics should be compared with other curriculum of other universities
- Discussion on the feedback received from the students and faculties regarding the syllabus
- **National Education Policy and its benefits were discussed**

Sl. No	Name of member	Designation	Signature
1.	Dr. B V N Ramakumar	Professor & Chairman – AE	Rama kumar 28/5/2022
2.	Dr. Ramachandra	External Member, NDRF	Ramachandra 28/5/22
3.	Dr. Balamurugan - G	External Member - NAL	Balamurugan 28/5/22
4.	Dr. Sivakumar	External Member – IISC	Sivakumar 28/5/22
5.	Dr. Suryanarayana G K	Professor	GK 28/5/22
6.	Dr. Sharatkumar Variyar	Associate Professor	Variyar M. 28/5/22
7.	Mr. Srinath R	Assistant Professor	Srinath R 28/05/22
8.	Mr. Kartik S Tandel	Assistant Professor	Kartik S 28/05/22
9.	Ms. Krishnam Suhrutha	Assistant Professor	Suhrutha K 28/05/22



**Dayananda Sagar University**  
**School of Engineering,**  
**Department of Aerospace Engineering**

**SCHEME 2020 – 2024 Batch**

**SCHEME - B. TECH – 2020-21 ONWARDS**

**1 SEM - CHEMISTRY CYCLE**

PROGRAM SL CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE		
				L	T	P	S/ P	C		SEM	COURSE CODE
1	101-105 &121-123	20EN1101	ENGINEERING MATHEMATICS - I	CR	03	01	--	--	04	*	***
2	101-105 &121-123	20EN1102	ENGINEERING CHEMISTRY	CR	03	--	02	--	04	*	***
3	101-105 &121-123	20EN1103	FUNDAMENTALS OF PROGRAMMING	CR	03	--	04	--	05	*	***
4	101-105 &121-123	20EN1104	BASIC ELECTRICAL ENGINEERING	CR	03	--	--	--	03	*	***
5	101-105 &121-123	20EN1105	ENVIRONMENTAL STUDIES	CR	02	--	--	--	02	*	***
6	101-105 &121-123	20EN1106	ELEMENTS OF MECHANICAL ENGINEERING	CR	02	--	02	--	03	*	***
7	101-105 &121-123	20AU0004	CONSTITUTION OF INDIA AND PROFESSIONAL ETHICS	AU	02	--	--	--	--	*	***
					16	01	08	--	21		

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

*Rana Anil*

Chairman  
 Dept of Aerospace Engineering  
 School of Engineering  
 Dayananda Sagar University  
 Bengaluru

**SCHEME - B.TECH - 2020-21 ONWARDS  
1 SEM - PHYSICS CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					SEM	PREREQUISITE COURSE CODE
					L	T	P	S / P	C		
1	101-105 & 121-123	20EN1101	ENGINEERING MATHEMATICS - I	CR	03	01	--	-	04	*	***
2	101-105& 121-123	20EN1107	ENGINEERING PHYSICS	CR	03	--	02	-	04	*	***
3	101-105& 121-123	20EN1108	BASIC ELECTRONICS	CR	03	--	02	-	04	*	***
4	101-105& 121-123	20EN1109	BIOLOGICAL SCIENCES	CR	02	--	--	-	02	*	***
5	101-105& 121-123	20EN1110	TECHNICAL COMMUNICATION	CR	02	--	02	-	03	*	***
6	101-105& 121-123	20EN1111	ENGINEERING GRAPHICS & DESIGN	CR	01	--	04	-	03	*	***
7	101-105& 121-123	20EN1112	DESIGN THINKING & INNOVATION	CR	--	--	02	-	01	*	***
					14	01	12	-	21		
101-105& 121-123		20AU0021	KANNADA KALI - II	AU	02	--	--	-	--	*	***
101-105& 121-123		20AU0025	KANNADA MANASU - II	AU	02	--	--	-	--	*	***

*Rana*

Chairman  
Department of Engineering  
University

**SCHEME - B. TECH - 2020-21  
ONWARDS II SEM - PHYSICS CYCLE**


SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING							PREREQUISITE	
					L	T	P	S	C	SE M	COURS E		
1	101-105 & 121-123	20EN1201	ENGINEERING MATHEMATICS - II	CR	03	01	--	-	04	*	***		
2	101-105 & 121-123	20EN1107	ENGINEERING PHYSICS	CR	03	--	02	-	04	*	***		
3	101-105 & 121-123	20EN1108	BASIC ELECTRONICS	CR	03	--	02	-	04	*	***		
4	101-105 & 121-123	20EN1109	BIOLOGICAL SCIENCES	CR	02	--	--	-	02	*	***		
5	101-105 & 121-123	20EN1110	TECHNICAL COMMUNICATION	CR	02	--	02	-	03	*	***		
6	101-105 & 121-123	20EN1111	ENGINEERING GRAPHICS & DESIGN	CR	01	--	04	-	03	*	***		
7	101-105 & 121-123	20EN1112	DESIGN THINKING & INNOVATION	CR	--	--	02	-	01	*	***		
					14	01	12	-	21				
					AU	02	--	--	--	--	*	***	
					AU	02	--	--	--	--	*	***	
9	101-105 & 121-123	20AU0021	KANNADA KALI	AU	02	--	--	-	--				
					AU	02	--	--	--	*	***		

*Rana*

**Chairman**  
Dept of Aerospace Engineering  
Sri Jayachamarajendra  
University  
Mysuru  
Kannada

S L	PROGRAM CODE	COUR SE COD E	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/ P	C	SE M	COURSE CODE
1	101-105&121-123	20EN1201	ENGINEERING MATHEMATICS - II	CR	03	01	--	--	04	*	**
2	101-105&121-123	20EN1102	ENGINEERING CHEMISTRY	CR	03	--	02	--	04	*	**
3	101-105&121-123	20EN1103	FUNDAMENTALS OF PROGRAMMING	CR	03	--	04	--	05	*	**
4	101-105&121-123	20EN1104	BASIC ELECTRICAL ENGINEERING	CR	03	--	--	--	03	*	**
5	101-105&121-123	20EN1105	ENVIRONMENTAL STUDIES	CR	02	--	--	--	02	*	**
6	101-105&121-123	20EN1106	ELEMENTS OF MECHANICAL ENGINEERING	CR	02	--	02	--	03	*	**
7	101-105&121-123	20AU0004	CONSTITUTION OF INDIA AND	AU	02	--	--	--	--	*	**
					16	01	08	--	21		


CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

  
**Chairman**  
 Department of Engineering  
 Dayananda Sagar University  
 Kudlu Gate, Bengaluru

**SCHEME - B.TECH - 2020-21 ONWARDS II**  
**SEM - CHEMISTRY CYCLE**

S L	PROGRAM CODE	COUR SE COD E	COURSE TITLE	CR / AU	SCHEME OF TEACHING						PREREQUISITE	
					L	T	P	S/ P	C	SE M	COURSE CODE	
1	101-105&121-123	20EN1201	ENGINEERING MATHEMATICS - II	CR	03	01	--	--	04	*	**	
2	101-105&121-123	20EN1102	ENGINEERING CHEMISTRY	CR	03	--	02	--	04	*	**	
3	101-105&121-123	20EN1103	FUNDAMENTALS OF PROGRAMMING	CR	03	--	04	--	05	*	**	
4	101-105&121-123	20EN1104	BASIC ELECTRICAL ENGINEERING	CR	03	--	--	--	03	*	**	
5	101-105&121-123	20EN1105	ENVIRONMENTAL STUDIES	CR	02	--	--	--	02	*	**	
6	101-105&121-123	20EN1106	ELEMENTS OF MECHANICAL ENGINEERING	CR	02	--	02	--	03	*	**	
					16	01	08	--	21			
7	101-105&121-123	20AU0004	CONSTITUTION OF INDIA AND	AU	02	--	--	--	--	*	**	

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

  
**Pawan Kumar**  
 Chairman  
 Department of Engineering  
 Dayananda Sagar University  
 Kudlu Gate, Bengaluru

**SCHEME - B. TECH - 2020-21 ONWARDS**  
**III SEM - AEROSPACE ENGINEERING**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING						PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE	
1	101		ENGINEERING MATHEMATICS - III	CR	04	..	..	..	..	04	*	***
2	101		INTRODUCTION TO AEROSPACE ENGINEERING	CR	03	..	..	..	..	03	*	***
3	101		THERMODYNAMICS	CR	03	..	..	..	..	03	*	***
4	101		FLUID MECHANICS	CR	03	..	..	..	..	03	*	***
5	101		MECHANICS OF SOLIDS	CR	03	..	..	..	..	03	*	***
6	101		AEROSPACE MATERIALS	CR	03	..	..	..	..	03	*	***
7	101		COMPOSITES LAB	CR	..	..	02	..	..	01	*	***
8	101		FLUID MECHANICS LAB	CR	..	..	02	..	..	01	*	***
9	101		MINI PROJECT - I	CR	..	..	..	02	01	01	*	***
					19	..	04	02	22			


*Prava Kundu*

Chairman  
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 School of Engineering  
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 Kudlu Gate, Bengaluru

**SCHEME - B.TECH - 2020-21 ONWARDS**


**IVSEM - AEROSPACE ENGINEERING**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING						SEM	PREREQUISITE COURSE CODE
					L	T	P	S/P	C			
1	101		AIRCRAFT PROPULSION	CR	03	-	--	--	03	*	*	
2	101		AERODYNAMICS - I	CR	03	-	--	--	03	*	*	
3	101		AEROSPACE STRUCTURAL MECHANICS	CR	03	-	--	--	03	*	*	
4	101		MECHANISMS AND MACHINE THEORY	CR	03	-	--	--	03	*	*	
5	101		MANUFACTURING PROCESSES	CR	03	-	--	--	03	*	*	
6	101		PRODUCT DESIGN - 1	CR	02	-	02	--	03	*	*	
7	101		AEROSPACE STRUCTURES LAB	CR	--	-	02	--	01	*	*	
8	101		MANUFACTURING PROCESSES LAB	CR	--	-	02	--	01	*	*	
9	101		MINI PROJECT - II	CR	--	-	--	02	01	*	*	
					17	-	06	02	21			

  
**Rana Vani**  
 Chairman  
 Dept of Aerospace Engineering  
 School of Engineering  
 Dayananda Sagar University  
 Kudlu Gate, Bengaluru

**V SEM - AEROSPACE ENGINEERING**

Sl.	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING						SCHEME OF EVALUATION		Pre Requisite
				L	T	P	S/P	C	CIA	END EXAM		
1		Aerodynamics-II	CR	03	00	--	--	03	60	40	Aerodynamics-1	
2		Introduction to Space Technology	CR	03	--	--	--	03	60	40	Introduction to Aerospace Engineering	
3		Aircraft Performance	CR	03	00	--	--	03	60	40		
4		Avionics	CR	03	--	--	--	03	60	40		
5		Program Elective - I	CR	03	--	--	--	03	60	40		
6		Open Elective - I	CR	03	--	--	--	03	60	40		
7		Avionics Lab	CR	--	--	02	--	1	60	40		
8		Flight Physics Lab	CR	--	--	02	--	1	60	40		
9		Mini Project - III	CR	--	--	--	02	1	60	40		
<b>TOTAL</b>				<b>18</b>	<b>03</b>	<b>04</b>	<b>02</b>	<b>21</b>	<b>540</b>	<b>360</b>		

  
**Rama**  
 Chairman  
 Dept of Aerospace Engineering  
 School of Engineering  
 Dayananda Sagar University  
 Kudlu Gate, Bengaluru

Programme Elective - I

Sl. No	Course Code	Course Name
1.	20AS3508	Wind tunnel model testing
2.	20AS3509	Finite elemental methods
3.	20AS3510	Air transportation system

*Rana*

Chairman  
Dept of Aerospace Engineering  
School of Engineering  
Dayananda Sagar University  
Koduru Gate, Bengaluru

VI SEMESTER

SL	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					SCHEME OF EVALUATION		Pre Requisite
				L	T	P	S/ P	C	CIA	END EXAM	
1.		CONTROL THEORY	CR	03	-	--	--	03	60	40	
2.		AIRCRAFT DESIGN	CR	03	-	--	--	03	60	40	
3.		AIRCRAFT STABILITY AND CONTROL	CR	03	-	--	--	03	60	40	Aircraft Performance
4.		ORBITAL MECHANICS	CR	03	-	--	--	03	60	40	Introduction to Space Technology
5.		PROGRAM ELECTIVE - II	CR	03	-	--	--	03	60	40	
6.		OPEN ELECTIVE - II	CR	03	-	--	--	03	60	40	
7.		SIMULATION LAB	CR	--	-	03	--	1	60	40	
8.		MODEL BASED SYSTEM ENGINEERING	CR	01	-	03	--	2	60	40	
9.		MINI PROJECT - IV	CR	--	-	--	04	1	60	40	
<b>TOTAL = 900</b>				<b>19</b>		<b>06</b>	<b>04</b>	<b>22</b>	<b>540</b>	<b>360</b>	

*P. Saha*

Chairman  
Dept of Aerospace Engineering  
School of Engineering  
Dayananda Sagar University  
Kudlu Gate, Bengaluru

**Program Elective -II**

<b>Sl. No</b>	<b>Course Name</b>
1.	Introduction to Computational Fluid Dynamics
2.	Fatigue & Fracture
3.	Principles of Management & Economics for Engineers

*Rosa Kund*

**Chairman**  
**Dept of Aerospace Engineering**  
**School of Engineering**  
**Dayananda Sagar University**  
**Kudiyu Gate, Bengaluru**

## Program Elective -II

Sl. No	Course Name
1.	Introduction to Computational Fluid Dynamics
2.	Fatigue & Fracture
3.	Principles of Management & Economics for Engineers

*Rana Anil*

Chairman  
Dept of Aerospace Engineering  
School of Engineering  
Dayananda Sagar University  
Kudlu Gate, Bengaluru

VII SEMESTER

SL	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING						SCHEME OF EVALUATION		Pre Requisite
				L	T	P	S/P	C	CIA	END EXAM		
1.		Introduction to Computational Fluid Dynamics	CR	2	0	2	0	3	60	40		
2.		Professional Elective Course - III	CR	3	0	0	0	3	60	40		
3.		Professional Elective Course -IV	CR	3	0	0	0	3	60	40		
4.		Open Elective - III	CR	3	0	0	0	3	60	40		
5.		Aviation Law	CR	2	0	0	0	2	60	40		
6.		Major Project Phase I	CR	0	0	0	6	3	60	40		
7.		Satellite Technologies	CR	2	0	2	0	3	60	40		
8.		Skill Enhance Course ( Technical Report Writing)	CR	0	0	0	2	1	60	40		
<b>TOTAL = 700</b>				16		4	6	21	420	280		

*Rama Kund*

Chairman  
Dept of Aerospace Engineering  
School of Engineering  
Dayananda Sagar University  
Kudlu Gate, Bengaluru

**Program Elective - III**

SL No	Course Code	Course Name
1.		Operation Management for Aerospace
2.		Unmanned Aerial Vehicle & E mobility

**Program Elective - IV**

SL No	Course Code	Course Name
1.		Airworthiness & Technical Publication
2.		NPTTEL ( Research Methodology )

*Rana Kund*

**Chairman**  
**Dept of Aerospace Engineering**  
**School of Engineering**  
**Dayananda Sagar University**  
**Kudlu Gate, Bengaluru**

VIII Semester

SL	COURS E CODE	COURSE TITLE	CR/ AU	SCHEME OF TEACHING					SCHEME OF EVALUATION		Pre Requisite	
				L	T	P	S/ P	C	CIA	END EXAM		
1.		Professional Elective Course - V	CR	3	0	0	0	3		60	40	
2.		Project Phase II	CR	0	0	0	0	11		60	40	
<b>TOTAL = 200</b>				3	0	0	22	14		120	80	

Program Elective - V

SL No	Course Code	Course Name
1.		Helicopter Dynamics
2.		NPTTEL

*Ravi Kumar*

Chairman  
Dept of Aerospace Engineering  
School of Engineering  
Dayananda Sagar University  
Kudlu Gate, Bengaluru

**SCHEME – B.TECH – 2021-22 ONWARDS**

**I SEM – CHEMISTRY CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING						PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE	
1	101-105 & 121-123	21EN1101	LINEAR ALGEBRA AND CALCULUS	CR	3	1	-	-	4	.	***	
2	101-105 & 121-123	21EN1102	ENGINEERING CHEMISTRY	CR	3	-	2	-	4	.	***	
3	101-105 & 121-123	21EN1103	BASIC ELECTRICAL ENGINEERING	CR	3	-	-	-	3	.	***	
4	101-105 & 121-123	21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	CR	2	-	2	-	3	.	***	
5	101-105 & 121-123	21EN1105	FUNDAMENTALS OF PROGRAMMING	CR	3	-	4	-	5	.	***	
6	101-105 & 121-123	21EN1106	ENVIRONMENTAL SCIENCES	CR	2	-	-	-	2	.	***	
7	101-105 & 121-123	21EN1107	KANNADA KALI/MANASU	CR	1	-	-	-	1	.	***	
					17	01	08	--	22			

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

*Rosa Kundu*

Chairman  
Dept of Aerospace Engineering  
School of Engineering  
Dayananda Sagar University  
Kudlu Gate, Bengaluru

**SCHEME - B.TECH - 2021-22 ONWARDS**

**I SEM - PHYSICS CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING							PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE		
1	101-105 & 121-123	21EN1101	LINEAR ALGEBRA AND CALCULUS	CR	3	1	-	-	-	4	.	...	
2	101-105 & 121-123	21EN1108	ENGINEERING PHYSICS	CR	3	-	2	-	-	4	.	...	
3	101-105 & 121-123	21EN1109	BASIC ELECTRONICS	CR	3	-	2	-	-	4	.	...	
4	101-105 & 121-123	21EN1110	ENGINEERING GRAPHICS AND DESIGN	CR	1	-	4	-	-	3	.	...	
5	101-105 & 121-123	21EN1111	ENGINEERING MECHANICS	CR	2	-	-	-	-	2	.	...	
6	101-105 & 121-123	21EN1112	BIOLOGICAL SCIENCES	CR	2	-	-	-	-	2	.	...	
7	101-105 & 121-123	21EN1113	TECHNICAL COMMUNICATION	CR	2	-	-	-	-	2	.	...	
8	101-105 & 121-123	21EN1114	DESIGN THINKING	CR	-	-	2	-	-	1	.	...	
					16	01	10	--	--	22			
9	101-105 & 121-123	21AU0004	CONSTITUTION OF INDIA AND ETHICS	AU	02	--	--	--	--	--	.	...	


CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

**SCHEME - B.TECH - 2021-22 ONWARDS**

**II SEM - CHEMISTRY CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	101-105 & 121-123	21EN1201	TRANSFORMS AND DIFFERENTIAL EQUATIONS	CR	3	1	-	-	4	.	...
2	101-105 & 121-123	21EN1102	ENGINEERING CHEMISTRY	CR	3	-	2	-	4	.	...
3	101-105 & 121-123	21EN1103	BASIC ELECTRICAL ENGINEERING	CR	3	-	-	-	3	.	...
4	101-105 & 121-123	21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	CR	2	-	2	-	3	.	...
5	101-105 & 121-123	21EN1105	FUNDAMENTALS OF PROGRAMMING	CR	3	-	4	-	5	.	...
6	101-105 & 121-123	21EN1106	ENVIRONMENTAL SCIENCES	CR	2	-	-	-	2	.	...
7	101-105 & 121-123	21EN1107	KANNADA KALI/MANASU	CR	1	-	-	-	1	.	...
					17	01	08	--	22		

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

  
 Rama  
 Chairman  
 Dept of Aerospace Engineering  
 School of Engineering  
 Dayananda Sagar University  
 Kudlu Gate, Bengaluru

**SCHEME - B,TECH – 2021-22 ONWARDS**

**II SEM – PHYSICS CYCLE**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING							PREREQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE		
1	101-105 & 121-123	21EN1201	TRANSFORMS AND DIFFERENTIAL EQUATIONS	CR	3	1	-	-	-	4	.	...	
2	101-105 & 121-123	21EN1108	ENGINEERING PHYSICS	CR	3	-	2	-	-	4	.	...	
3	101-105 & 121-123	21EN1109	BASIC ELECTRONICS	CR	3	-	2	-	-	4	.	...	
4	101-105 & 121-123	21EN1110	ENGINEERING GRAPHICS AND DESIGN	CR	1	-	4	-	-	3	.	...	
5	101-105 & 121-123	21EN1111	ENGINEERING MECHANICS	CR	2	-	-	-	-	2	.	...	
6	101-105 & 121-123	21EN1112	BIOLOGICAL SCIENCES	CR	2	-	-	-	-	2	.	...	
7	101-105 & 121-123	21EN1113	TECHNICAL COMMUNICATION	CR	2	-	-	-	-	2	.	...	
8	101-105 & 121-123	21EN1114	DESIGN THINKING	CR	-	-	2	-	-	1	.	...	
					16	01	10	--	--	22			
9	101-105 & 121-123	21AU0004	CONSTITUTION OF INDIA AND ETHICS	AU	02	--	--	--	--	--	.	...	

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits



# Dayananda Sagar University

## School of Engineering

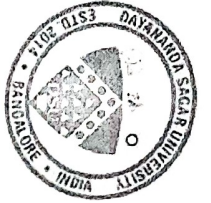
Innovation Campus, Kudlu Gate, Hosur Road, Bengaluru

**SCHEME 2021 - 2025 Batch**

### Department of ASE

**III SEMESTER**

S.N	Course Type	Course Code	Course Name	Teaching Department	Teaching Hours / Week				Examination				Credits
					L	T	P	J	Duration in Hours	CIE Marks	SEE Marks	Total Marks	
1	BSC		Complex Variables and Numerical Methods	MAT	4	0	0	0	3	60	40	100	4
2	PCC		Thermodynamics	ASE	3	0	0	0	3	60	40	100	3
3	PCC		Introduction to Aerospace Engineering	ASE	3	0	0	0	2	60	40	100	3
4	IPCC		Fluid Mechanics	ASE	3	0	0	0	5	60	40	100	3
5	IPCC		Mechanics of Solids	ASE	3	0	0	0	5	60	40	100	3
6	IPCC		Aerospace Materials	ASE	3	0	0	0	5	60	40	100	3
7	UHV		MATERIALS & MANUFACTURING LAB			0	2	0	1	100	--	100	1
8	SEC		FLUID MECHANICS LAB	ASE	0	0	2	0	2	100	--	100	1
9			MINI PROJECT - I		0	0	0	2					1
			<b>Total</b>		18	0	8	0	26	560	240	800	22



# Dayananda Sagar University

## School of Engineering

Innovation Campus, Kudlu Gate, Hosur Road, Bengaluru

### IV SEMESTER

S.N	Course Type	Course Code	Course Name	Teaching Department	Teaching Hours / Week				Duration in Hours	Examination			Credits
					L	T	P	J		CIE Marks	SEE Marks	Total Marks	
1	PCC		AIRCRAFT PROPULSION	ASE	3	0	0	0	3	60	40	100	3
2	PCC		AERODYNAMICS - I	ASE	3	0	0	0	3	60	40	100	3
3	PCC		AEROSPACE STRUCTURAL MECHANICS	ASE	3	0	0	0	3	60	40	100	3
4	IPCC		MECHANISMS AND MACHINE THEORY	ASE	3	0	0	0	3	60	40	100	3
5	IPCC		MANUFACTURING PROCESSES	ASE	3	0	0	0	3	60	40	100	3
6	IPCC		PRODUCT DESIGN - I	ASE	2	0	2	0	3	60	40	100	3
7	SEC		AEROSPACE STRUCTURES LAB	ASE	0	0	2	0	2	100	--	100	1
8	SEC		AEROSPACE PROPULSION LAB	ASE	0	0	2	0	2	100	--	100	1
9			MINI PROJECT - II		0	0	0	2	2	100	--	100	1
			<b>Total</b>		18	0	8	0	24	560	240	900	21

NOTE: Total credits in each semester (from 5th to 7th Sem) shall range between 20 - 23

*R. Govind*  
 Chairman  
 Dept of Aerospace Engineering  
 School of Engineering  
 Dayananda Sagar University  
 Bengaluru



# Dayananda Sagar University

## School of Engineering

Innovation Campus, Kudlu Gate, Hosur Road, Bengaluru

### V SEMESTER

S.N	Course Type	Course Name	Teaching Department	Teaching Hours / Week				Duration in Hours	Examination			Credits
				L	T	P	J		CIE Marks	SEE Marks	Total Marks	
1	PCC	Aerodynamics - II	ASE	3	0	0	0	3	60	40	100	3
2	PCC	Drives and Actuators	ASE	2	0	2	0	4	60	40	100	3
3	PCC	Aircraft Performance	ASE	3	0	0	0	3	60	40	100	3
4	PCC	Introduction to Space Technology	ASE	3	0	0	0	3	60	40	100	3
5	PEC	Professional Elective Course - I	ASE	3	0	0	0	3	60	40	100	3
6	PCC	Model Based System Engineering (MBSE)	ASE	2	0	2	0	4	60	40	100	3
7	PCC	Introduction to Computational Fluid Dynamics	ASE	2	0	2	0	4	60	40	100	1
8	PCC	Flight Physics Lab	ASE	0	0	2	0	2	60	40	100	1
<b>Total</b>				<b>18</b>	<b>0</b>	<b>8</b>	<b>2</b>	<b>28</b>	<b>540</b>	<b>360</b>	<b>900</b>	<b>22</b>

Departmental Electives: Wind Tunnel Testing, NPTEL/MOOC - 2 Courses

Open Elective: Introduction to Aerospace Engineering

*Rana*


Chairman  
Dept of Aerospace Engineering  
School of Engineering  
Dayananda Sagar University  
Bengaluru

**VI SEMESTER**

S.N	Course Type	Course Name	Teaching Department	Teaching Hours / Week				Duration in Hours	Examination			Credits
				L	T	P	J		CIE Marks	SEE Marks	Total Marks	
1	PCC	Avionics	ASE	3	0	2	0	5	60	40	100	4
2	PCC	Orbital Mechanics	ASE	3	0	0	0	5	60	40	100	3
3	PCC	Control Systems	ASE	3	0	2	0	5	60	40	100	4
4	PCC	Aircraft Stability and Control	ASE	3	0	0	0	3	60	40	100	3
5	OEC	Open Elective - I	ASE	3	0	0	0	3	60	40	100	3
6	PEC	Professional Elective Course - II / MOOC	ASE	3	0	0	0	3	60	40	100	3
7	PCC	Introduction to Finite Element Analysis	ASE	2	0	2	0	5	60	40	100	3
8	SEC	Skill Enhancement Course - (Aerospace Systems Design and modelling)	ASE	0	0	2	0	2	60	40	100	1
<b>Total</b>				18	0	8	2	28	480	320	800	23

*Rowa hant*  
 Chairman  
 Dept of Aerospace Engineering  
 School of Engineering  
 Dayananda Sagar University  
 Dayananda Sagar Gate, Bengaluru

S.N	Course Type	Course Name	Teaching Department	Teaching Hours / Week				Examination				Credits
				L	T	P	J	Duration in Hours	CIE Marks	SEE Marks	Total Marks	
1	HSMC	Principles of Management & Economics for Engineers	ASE	3	0	0	0	3	60	40	100	3
2	PCC	Aircraft Design	ASE	3	0	0	0	3	60	40	100	3
3	OEC	Open Elective - II	ASE	3	0	0	0	3	60	40	100	3
4	PEC	Professional Elective Course - III / MOOC	ASE	3	0	0	0	3	60	40	100	3
5	PEC	Professional Elective Course -IV / MOOC	ASE	3	0	0	0	3	60	40	100	3
6	PCC	Satellite Technologies	CSST	2	0	2	0	4	60	40	100	3
7	PROJ	Major Project Phase I	ASE	0	0	0	6	6	60	40	100	3
8	HSMC	Aviation Law	School of Law	2	0	0	0	3	60	40	100	2
<b>Total</b>				20	0	2	6	28	480	320	800	23

  
 Rama Lakshmi  
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 Kudlu Gate, Bengaluru

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**School of Engineering**  
 Innovation Campus, Kudlu Gate, Hosur Road, Bengaluru

**VIII SEMESTER**

Course Name	Teaching Department	Teaching Hours / Week				Duration in Hours	Examination			Credits
		L	T	P	J		CIE Marks	SEE Marks	Total Marks	
Project Phase II	ASE	0	0	0	22	22	60	40	100	11
Professional Elective Course - V / MOOC	ASE	3	0	0	0	3	60	40	100	3
<b>Total</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>25</b>	<b>120</b>	<b>80</b>	<b>200</b>	<b>14</b>

VIII Sem) = 44 (I/II Sem) + 125 (III to VIII Sem) 169 credits.

*Rama Kant*  
**Chairman**  
 Dept of Aerospace Engineering  
 School of Engineering  
 Dayananda Sagar University  
 Kudlu Gate, Bengaluru



# Dayananda Sagar University

School of Engineering, Kudlu Gate,  
Hosur Main Road,  
Bengaluru - 560068

Department of Electronics and Communication Engineering

Board of Studies (BOS) May-2022 (UG Programme of Dayananda Sagar University).

Minutes of meeting – 8<sup>th</sup> May 2021

## Agenda

1. Review of the 2nd year (4th and 5th Sem) Syllabus for New Scheme (60:40) B.Tech (ECE) 2020-24
2. Finalization of the 3rd year (7th and 8th Sem) Syllabus for New Scheme B.Tech (ECE) 2019-23
3. Review of the Scheme and Syllabus (1st and 2nd Sem) and scheme B.Tech (ECE)
4. Major and Minor Degree
5. NEP 2020
6. Students Feedback on Curriculum for 2019 -2023
7. Approval of revised mission and vision.

Minutes of the Board of Studies of Electronics and Communication Engineering Meeting held on 17-05-2022 virtually on Google meet platform at 09:30 am:

The following members were present during the online meeting

BOS MEMBERS PRESENT	
Dr. Vaibhav Mesharam Chairman Department of ECE , SoE, DSU	Dr. Arungalai Vendan Department of ECE , SOE, DSU
Dr. Ravish Aradhya H V, Professor, Dept. of ECE, RVCE, Bangalore	Dr. Pusphamala S Department of ECE , SoE, DSU
Mr. C P Ravikumar, Texas Instrument	Dr. Gayathri K M Department of ECE , SoE, DSU
Dr. Cyril Raj	Dr. Sneha Sharma Department of ECE , SoE, DSU
Mr. Santhosh Adinarayana, Maxim Integrated India Pvt Ltd.	Mr. Abhinav Karan Department of ECE , SoE, DSU
Dr. Narasimha kaulgud, Professor, NIE, Mysore	Mr. Puneeth S Department of ECE , SoE, DSU
Dr Kiran A Gupta, DSCE	Mrs. Anna Merian George Department of ECE , SoE, DSU
Mr. Abishek S Alumini, L & T	Mrs. Manasa K R Department of ECE , SoE, DSU
Mr. Abhinav G A, Alumini	Mrs. Kanmani BS Department of ECE , SoE, DSU
Dr. Rajashee N, Department of ECE , SoE, DSU	Mrs Kokila S Department of ECE , SoE, DSU
Dr. Puspha P V Department of ECE , SOE, DSU	Dr. Theodore Chandra Department of ECE , SoE, DSU

- ✓ Chairman welcomed all the External and Internal BOS Members.
- ✓ Chairman briefed about the agenda along with the introduction of Alumni members.
- ✓ The 2019-2023 Course Scheme was discussed in length and suggestions and inputs for Scheme and Syllabus were noted.
- ✓ Chairman briefed about the 2021 scheme and syllabus of basic electronics and basic electrical.
- ✓ Chairman seek the approval to include the subjects with respective to the MOU signed with BOSCH Rexroth.
- ✓ Chairman seeks the approval for revised mission and vision of the department.
- ✓ It is suggested to have ONE PROPER TEXT BOOK for framing the syllabus at the Undergraduate Level.
- ✓ Special initiatives can be renamed as Minor Projects I/II and evaluation pattern should be clearly defined.
- ✓ BoS strongly suggested to make embedded system design as a core subject.
- ✓ BoS suggested to make Information theory and coding as a core subject.
- ✓ Distribution of the teaching hours should be uniform for all five modules.
- ✓ BoS suggested to reorganize the contents for subjects such as C programming for embedded System, Embedded system design and Real time Embedded systems.
- ✓ Alumni members suggested to push the subjects like antenna wave propagations and power electronics before seventh semester as this subject highly demands concentration and time.
- ✓ Common format should be maintained for all the subject before going for the hardbound of the syllabus
- ✓ Dr. Gayathri K. M. of the department noted the minutes of the meeting and readout the complete BOS proceedings.
- ✓ Chairman of the Department proposed vote of thanks for the valuable inputs given by the External BOS Members.

#### REVISED VISION STATEMENT:

- To create innovative Engineers and Entrepreneurs with technological excellence, professional commitment, and social responsibility for serving national and global needs.

#### REVISED MISSION STATEMENT:

- Inculcate Academic Excellence through innovative teaching and learning processes and espousing appropriate pedagogical parameters.
- Reinforce the Students with desired technical aptitude, entrepreneurial and leadership skill sets enabling them to face the challenges of globalization and technological sophistication.
- Initiation with understanding the psychology of students, socio-cultural aspects of the bidirectional learners, vitality of interdisciplinary approach, value addition through interactive and collaborative learning. This is followed by systematic and sequential implementation of syllabus upgradations on par with industrial revolution.

UG; 5<sup>th</sup> and 6<sup>th</sup> Semester – 2019 Course Matrix

Sl.No	Semester	Subject Title	Suggestions by the BOS Committee
1.	5 <sup>th</sup>	Analog and Digital Communication	<ul style="list-style-type: none"> <li>▪ TDM concept can be removed if it is not much relevant.</li> <li>▪ Include multirate sampling, sampling rate conversion, one or two topics of new trends of communication.</li> <li>▪ Alumni suggested one module should be on application</li> </ul>
2.	5 <sup>th</sup>	PTSP	<ul style="list-style-type: none"> <li>▪ The subjects can be correlated to the applications of engineering domains such as signal processing, Machine learning, Data science</li> <li>▪ The open-ended problems can included from the domains such as communication, control, verification and so on</li> <li>▪ The team of analog and digital communication and PTSP can frame 5<sup>th</sup> module syllabus in terms of application or case studies which account for mini projects.</li> </ul>
3.	5 <sup>th</sup>	CMOS VLSI design	<ul style="list-style-type: none"> <li>▪ Finfets and memsistors can be removed or pushed to advanced subjects of VLSI</li> <li>▪ Include MOS model parameters and Scaling concepts</li> </ul>
4.	5 <sup>th</sup>	Digital Signal Processing	<ul style="list-style-type: none"> <li>▪ BoS members suggested to open a new elective on DSP Architecture and Algorithms implementation.</li> </ul>
5.	5 <sup>th</sup>	Information theory and coding	<ul style="list-style-type: none"> <li>▪ No change</li> </ul>
6.	5 <sup>th</sup>	MEMS	<ul style="list-style-type: none"> <li>▪ No Change</li> </ul>
7.	5 <sup>th</sup>	C Programing for embedded system	<ul style="list-style-type: none"> <li>▪ Module 1 and 2 can be combined</li> <li>▪ Include more concepts on interfacing with output devices and sensors.</li> <li>▪ Basics C concepts can be removed as it is thought prior</li> <li>▪ The textbook provided covers only the basic of C, which will not emphasize on embedded system. Hence provide proper textbook which emphasize on</li> </ul>

			<p>both such as “ Peterson for embedded C programming”</p> <ul style="list-style-type: none"> <li>▪ Application of this subject should bring in terms of case studies</li> <li>▪ Clearly define the syllabus is for embedded systems or it is C programming.</li> </ul>
8.	5 <sup>th</sup>	PLC ( Introduced New Subject related to Bosch Rexroth Lab) Request for the code	<ul style="list-style-type: none"> <li>▪ No Change</li> </ul>
9.	6 <sup>th</sup>	RF and microwave	<ul style="list-style-type: none"> <li>▪ No Change</li> </ul>
10.	6 <sup>th</sup>	Power Electronics	<ul style="list-style-type: none"> <li>▪ Include in module 5 the concepts related to battery and battery charging which is more relevant to electric vehicles.</li> <li>▪ Ned Mohan can also be included as a textbook</li> </ul>
11.	6 <sup>th</sup>	Analog VLSI Design	<ul style="list-style-type: none"> <li>▪ No change</li> <li>▪ Needs clarity on one stage opamp</li> </ul>
12.	6 <sup>th</sup>	Embedded System design	<ul style="list-style-type: none"> <li>▪ Module 5 can be a part of embedded programming</li> <li>▪ Include Overview of operating systems.</li> <li>▪ Some of the topics such as traffic light sequencing can be moved to C programming for embedded system.</li> <li>▪ Module 3 is repetition.</li> <li>▪ After the scrutiny of 5<sup>th</sup> Sem and 6<sup>th</sup> Sem subjects, members opinioned to reorganize the contents in embedded system design and C programming for embedded system</li> <li>▪ Alumni suggested the following points from industry perspective <ul style="list-style-type: none"> <li>➤ Module 1 and 2 should be the specification of applications</li> <li>➤ Pointers and structures can be elaborated.</li> <li>➤ Include RAM and ROM read and writing</li> <li>➤ Include HSM (Hardware Security Module)</li> </ul> </li> </ul>
13.	6 <sup>th</sup>	Digital IC design	<ul style="list-style-type: none"> <li>▪ Include the concept of metastability</li> <li>▪ Focus on few concepts and specify the adders.</li> </ul>
14.	6 <sup>th</sup>	Digital Image Processing	<ul style="list-style-type: none"> <li>▪ No Change</li> </ul>

15.	6 <sup>th</sup>	Industry 4.0( Introduced New Subject related to Bosch Rexroth Lab) Request for the code	<ul style="list-style-type: none"> <li>▪ Can be renamed as IIoT (Industrial IoT)</li> <li>▪ Check the availability of textbook which is mentioned, and also selection of the good textbook is very important at UG level.</li> <li>▪ TCP/IP is already introduced in networking subject, hence can be removed.</li> <li>▪ The syllabus should be reorganized.</li> <li>▪ Members suggested to emphasize on history, evolution and introduction about IIOT.</li> </ul>
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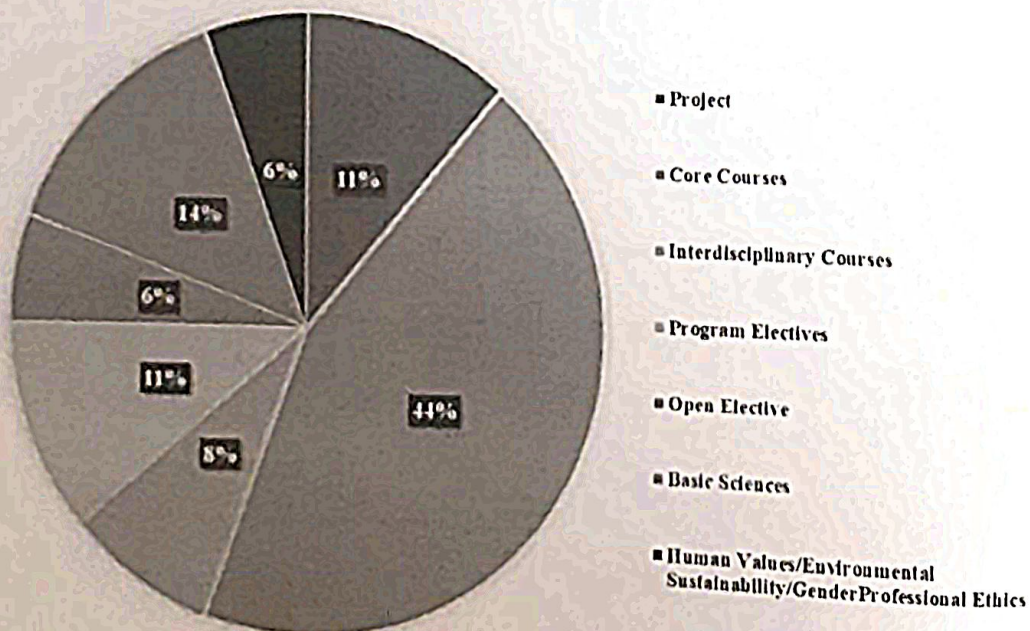
**UG: 1<sup>st</sup> and 2<sup>nd</sup> Semester – 2021 Course Matrix**

Sl.No	Semester	Subject Title	Suggestions by the BOS Committee
1	1 <sup>st</sup> /2 <sup>nd</sup>	Basic Electrical	▪ No Change
2	1 <sup>st</sup> /2 <sup>nd</sup>	Basic Electronics	▪ No Change
3	Scheme 2021-2025	B.Tech (ECE)	▪ No Change

1. The Board of Studies finalized the following scheme and syllabus for B.Tech(ECE) 2019-23. The detailed scheme for 5<sup>th</sup> and 6<sup>th</sup> semesters are given as follows:

**SCHEME - B. TECH – 2019 -20**

**Pie Chart-Scheme Distribution**



**V SEM - ELECTRONICS & COMMUNICATION ENGINEERING**

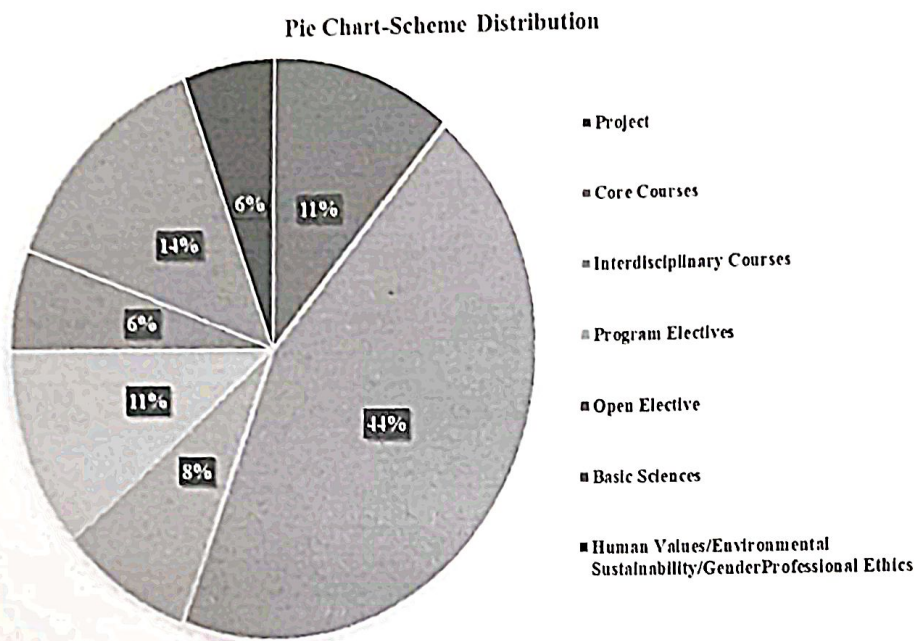
Sl. No.	PROGRAM CODE	COURSE CODE	COURSE TITLE	$\frac{AU}{CR}$	Scheme of Teaching				
					L	T	P	S/P	C
1	102	19EC3501	Analog and Digital Communication	CR	03		02		04
2	102	19EC3502	Probability Theory and Stochastic Processes	CR	03	01	--		04
3	102	19EC3503	CMOS VLSI Design	CR	03	--	02		04
4	102	19EC3504	Digital Signal Processing	CR	03		02		04
5	102	19EC35XX	Program Elective - I	CR	03		--		03
6	102	19OEXXXX	Open Elective-I	CR	03	--	--		03
7	102	19EC3505	Special Initiatives -III	CR	--	--		04	02
<b>Grand Total</b>					<b>18</b>	<b>01</b>	<b>06</b>	<b>04</b>	<b>24</b>

**SCHEME-B.TECH - 2019-20**

**VI SEM - ELECTRONICS & COMMUNICATION ENGINEERING**

Sl. No.	PROGRAM CODE	COURSE CODE	COURSE TITLE	$\frac{AU}{CR}$	Scheme of Teaching				
					L	T	P	S/P	C
1	102	19EC3601	RF and Microwave Communication	CR	03	--	02	--	04
2	102	19EC3602	Networking and Communication	CR	03	--	02	--	04
3	102	19EC3603	Power Electronics	CR	03	--	02	--	04
4	102	19EC36XX	Program Elective - II	CR	03	--	--	--	03
5	102	19EC36XX	Program Elective -III	CR	03	--	--	--	03
6	102	19OEXXXX	Open Elective-II	CR	03	--	--	--	03
<b>Grand Total</b>					<b>18</b>	<b>--</b>	<b>06</b>	<b>--</b>	<b>21</b>

2. The Board of Studies recommended that the program be delivered for B.Tech (ECE) 2020-24 as follows:



**SCHEME - B.TECH – 2020-21**

**III SEM - ELECTRONICS & COMMUNICATION ENGINEERING**

S L	PROGRAM CODE	COURSE CODE	COURSE TITLE	AU CR	Scheme of Teaching				
					L	T	P	S /P	C
1	102	20EC2301	ENGINEERING MATHEMATICS-III	CR	3	1	-	-	4
2	102	20EC2302	ANALOG CIRCUITS	CR	3	-	2	-	4
3	102	20EC2303	DIGITAL SYSTEM DESIGN WITH VERILOG	CR	3	-	2	-	4
4	102	20EC2304	NETWORK ANALYSIS	CR	3	1	-	-	4
5	102	20ENC001	ENGINEERING ECONOMICS	CR	2	-	-	-	2
8	102	20EC2305	SPECIAL INITIATIVES -I	CR	-	-	-	4	2
<b>GRAND TOTAL</b>					<b>14</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>20</b>


**SCHEME - B. TECH – 2020 -21 ONWARDS**

**IV SEM - ELECTRONICS & COMMUNICATION ENGINEERING**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	$\frac{AU}{CR}$	Scheme of Teaching				
					L	T	P	S /P	C
1	102	20EC2401	SIGNALS AND SYSTEMS	CR	3	1	-	-	4
2	102	20EC2402	COMPUTER SYSTEM ARCHITECTURE	CR	3	1	-	-	4
3	102	20EC2403	MICROCONTROLLERS	CR	3	-	2	-	4
4	102	20EC2404	ELECTROMAGNETIC WAVES	CR	3	-	2	-	4
5	102	20ENC002	LAW FOR ENGINEERS	CR	2	-	-	-	2
6	102	20EC2405	SPECIAL INITIATIVES -II	CR	-	-	-	4	2
<b>GRAND TOTAL</b>					<b>14</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>20</b>

3. The Board of Studies reviewed and approved the syllabus and scheme to be delivered for B.Tech (ECE) 2021-25 as follows:

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	$\frac{AU}{CR}$	Scheme of Teaching				
					L	T	P	S /P	C
1	101-105 & 121-123	21EN1105	INTRODUCTION TO ELECTRICAL ENGINEERING	CR	3	-	-	-	3
2	101-105 & 121-123	21EN1111	INTRODUCTION TO ELECTRONICS	CR	3	-	-	-	3

  
**Chairman**  
**Department of Electronics & Communication Engineering**  
**School of Engineering**  
**Dayananda Sagar University, Bengaluru**

Dept. of Electronics and Communication Engineering  
 School of Engineering,  
 Dayananda Sagar University,  
 Kudla Gate, Hosur Main Road,  
 Bengaluru - 560 083

8th BOS Meeting:ECE Departmen... X

People (22) Chat

Add people

IN CALL

- Dr Gayathri (Nou)
- Abhinav GA
- abhinav karan
- Abhishek S
- Anungalai Vandan
- Chairman ECE
- Darshan Halliyavar

11:43 08-05-2021

8th BOS Meeting:ECE Departmen... X

People (21) Chat

Chairman ECE is presenting

- Chairman ECE
- Chairman ECE Presentation
- Dr. KIRAN GUPTA
- Dr. Rajashree Narendra
- Dr. Theodore Chandra S
- Dr. Narasimha kaugud
- Karmani B S
- Kokila Sreeni 323
- Manasa KR

13:28 08-05-2021

Chairman  
 Department of Electronics & Communication Engineering  
 School of Engineering  
 Dayananda Sagar University, Bengaluru  
 Dayananda Sagar University,  
 Kuddu Gate, Hosur Main Road,  
 Bengaluru - 560 083



# Dayananda Sagar University

## School of Engineering

Innovation Campus, Kudlu Gate, Hosur Road, Bengaluru

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Board of Studies Meeting held on 8<sup>th</sup> May 2021 Agenda and Actionplan.

Sl. No.	Agenda
1	Review of the 2 <sup>nd</sup> year Syllabus for New Scheme (60:40) B.Tech (ECE) 2020-24.
2	Finalization of the 3 <sup>rd</sup> Year (7 <sup>th</sup> Sem and 8 <sup>th</sup> Sem) Syllabus for New Scheme B.Tech (ECE) 2020-24.
3	Review of the scheme and syllabus (1 <sup>st</sup> and 2 <sup>nd</sup> Sem) and scheme B.Tech (ECE)
4	Major and Minor Degree
5	NEP 2020
6	Students Feedback on Curriculum for 2019-2023

## Action Plan:

Sl. No	Sugee	Action Taken
1	<p><u>Analog and Digital Communication:</u></p> <ul style="list-style-type: none"> <li>• TDM concept can be removed if its not much relavant.</li> <li>• Include multirating sampling, sampling rate conversion one or two topics of new trends of communication.</li> <li>• Alumni suggested one module should be on application.</li> </ul>	<ul style="list-style-type: none"> <li>• Suggestions are incorporated in the syllabus.</li> </ul>
2	<p><u>PTSP:</u></p> <ul style="list-style-type: none"> <li>• The subjects can be correlated to the applications of engineering domains such as signal processing, Machine learning, Data Science.</li> <li>• The open-ended problems can be included from the domains such as communication, control, verification and so on.</li> <li>• The team of analog and digital communication and PTSP can frame 5<sup>th</sup> module syllabus in terms of application or case studies which account for mini projects.</li> </ul>	<p>The PTSP syllabus has been formulated to align with diverse engineering domains and is application-based, providing students with opportunities to leverage their knowledge in the creation of meaningful mini projects.</p>
3	<p><u>CMOS VLSI Design:</u></p> <ul style="list-style-type: none"> <li>• Finefets and memsistors can be removed or pushed to advanced subjects of VLSI.</li> <li>• Include MOS model parameters and scaling concepts.</li> </ul>	<ul style="list-style-type: none"> <li>• Suggestions are incorporated in the syllabus.</li> </ul>
4	<p><u>Digital Signal Processing:</u></p> <ul style="list-style-type: none"> <li>• BoS members suggested to open a new elective on DSP Architecture and Algorithms implementation.</li> </ul>	<ul style="list-style-type: none"> <li>• "DSP Architecture and Algorithms implementation" elective subject has been introduced.</li> </ul>
5	<p><u>C Programming for Embedded systems:</u></p> <ul style="list-style-type: none"> <li>• Module 1 and 2 can be combined.</li> <li>• Include more concepts on interfacing with output devices and sensors.</li> <li>• Basics C concepts can be removed as it is thought prior.</li> <li>• The textbook provided covers only the basic of C, which will not emphasize on embedded system. Hence provide proper textbook which emphasize on both such as "Peterson for embedded C programming".</li> <li>• Application of this subject should bring in terms of case studies.</li> </ul>	<ul style="list-style-type: none"> <li>• Suggestions are incorporated in the syllabus.</li> </ul>

  
 School of Electronics and Communication Engineering  
 School of Engineering,  
 Jayananda Sagar University,  
 Kuvolu Gate, Hosur Main Road,  
 Bengaluru - 560 068



## Request for Approval of Programme Structure - Academic Year 2021-22 (2021-Scheme) - Electronics and Communication Engineering

Narasimha Kaulgud <narasimha.kaulgud@nie.acin>  
To: Chairman ECE <chairman-ece@dsu.edu.in>

Mon, May 03, 2021 at 16:39 PM

I am pleased to inform you that, after careful consideration, I approve the proposed Programme Structure for the Academic Year 2021-22 in the Electronics and Communication Engineering department.

Thanks and regards

Dr.Narasimha kaulgud,  
Professor, NIE, Mysore

On Mon, 03 May, 2021 at 16:39AM Chairman ECE <chairman-ece@dsu.edu.in> wrote:

Dear Sir/Mam,

I hope this email finds you well. I am writing to formally submit the proposed Programme Structure for the Academic Year 2021-22, specifically for the Electronics and Communication Engineering department, based on the 2021-Scheme.

We have diligently crafted the proposed Programme Structure, taking into account the evolving landscape of the field and the feedback received from our esteemed faculty members. The changes introduced aim to enhance the overall learning experience and ensure the relevance of our curriculum to the current industry demands.

We kindly request your review and approval of the proposed Programme Structure. Your feedback and insights are highly valuable to us, and we are open to making any necessary adjustments to meet the department's expectations.



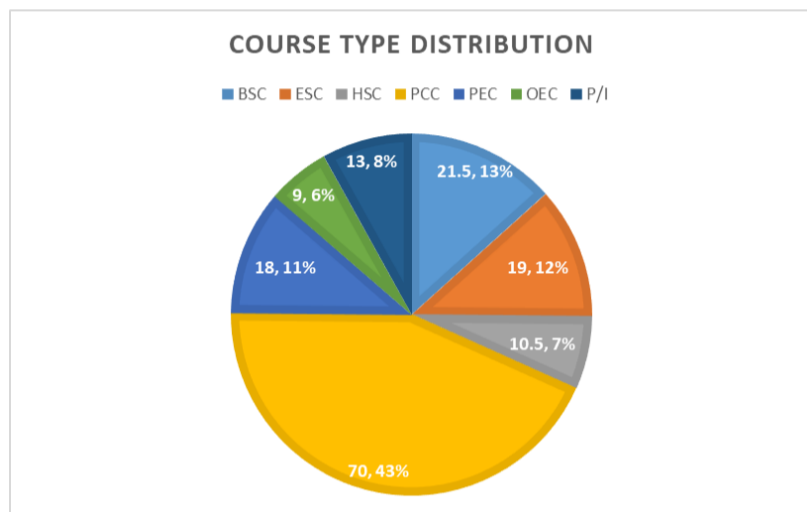
### Department of Electronics And Communication Engineering Programme Structure for Academic Year 2021-22 (2021-Scheme)

I Sem				II Sem				III Sem				IV Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21EN1101	LINEAR ALGEBRA AND CALCULUS	4	BSC	21EN1201	TRANSFORMS AND DIFFERENTIAL EQUATIONS	4	BSC	21EC2301	ENGINEERING MATHEMATICS – III – ECE	4	BSC	21EC2401	SIGNALS AND SYSTEMS	4	PCC
21EN1102	ENGINEERING CHEMISTRY	4	BSC	21EN1108	ENGINEERING PHYSICS	4	BSC	21EC2302	ANALOG CIRCUITS	4	PCC	21EC2402	COMPUTER SYSTEM ARCHITECTURE	4	PCC
21EN1103	BASIC ELECTRICAL ENGINEERING	3	ESC	21EN1109	BASIC ELECTRONICS	4	ESC	21EC2303	DIGITAL SYSTEM DESIGN WITH VERILOG	4	PCC	21EC2403	MICROCONTROLLERS	4	PCC
21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	3	ESC	21EN1110	ENGINEERING GRAPHICS AND DESIGN	3	HSC	21EC2304	NETWORK ANALYSIS	4	PCC	21EC2404	ELECTROMAGNETIC WAVES	4	PCC
21EN1105	FUNDAMENTALS OF PROGRAMMING	5	HSC	21EN1111	ENGINEERING MECHANICS	2	HSC	21ENC001	ENGINEERING ECONOMICS	2	HSC	21ENC002	LAW FOR ENGINEERS	2	HSC
21EN1106	ENVIRONMENTAL SCIENCES	2	ESC	21EN1112	BIOLOGICAL SCIENCES	2	ESC	21EC2305	SPECIAL INITIATIVES – I	2	PCC	21EC2405	SPECIAL INITIATIVES – II	2	PCC
21EN1107	KANNADA KALI/MANASU	1		21EN1113	TECHNICAL COMMUNICATION	2	ESC								
				21EN1114	DESIGN THINKING	1									
				21AU0004	CONSTITUTION OF INDIA AND ETHICS	0									
<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>20</b>		<b>TOTAL</b>		<b>20</b>	

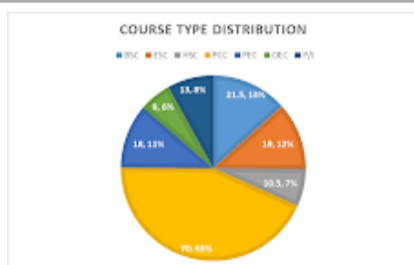
V Sem				VI Sem				VII Sem				VIII Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21EC3501	ANALOG AND DIGITAL COMMUNICATION	4	PCC	21EC3601	RF AND MICROWAVE COMMUNICATION	4	PCC	21EC4701	ROBOTICS AND CONTROL SYSTEMS	4	PCC	21EC48XX	PROGRAM ELECTIVE – VI	3	PEC

21EC3502	PROBABILITY THEORY AND STOCHASTIC PROCESSES	4	PCC	21EC3602	NETWORKING AND COMMUNICATION	4	PCC	21EC4702	ANTENNAS AND WAVE PROPAGATION	4	PCC	21EC4801	PROJECT STAGE – II	10	P/I
21EC3503	CMOS VLSI DESIGN	4	PCC	21EC3603	POWER ELECTRONICS	4	PCC	21EC47XX	PROGRAM ELECTIVE – IV	3	PEC				
21EC3504	DIGITAL SIGNAL PROCESSING	4	PCC	21EC36XX	PROGRAM ELECTIVE -II	3	PEC	21EC47XX	PROGRAM ELECTIVE – V	3	PEC				
21EC35XX	PROGRAM ELECTIVE – I	3	PEC	21EC36XX	PROGRAM ELECTIVE – III	3	PEC	21OEXXXX	OPEN ELECTIVE – III	3	OEC				
21OEXXXX	OPEN ELECTIVE – I	3	OEC	21OEXXXX	OPEN ELECTIVE – II	3	OEC	21EC4703	PROJECT STAGE-I	2	P/I				
21EC3505	SPECIAL INITIATIVES – III	2	PCC												

<b>TOTAL</b>	<b>24</b>		<b>TOTAL</b>	<b>21</b>		<b>TOTAL</b>	<b>19</b>		<b>TOTAL</b>	<b>13</b>
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- |                          |    |     |  |
|--------------------------|----|-----|--|
| BSC                      | 20 | BSC | Basic Sciences (Subjects such as Physics, Chemistry, Maths)                  |
| ESC                      | 16 | HSC | Humanities Sciences  |
| HSC                      | 14 | ESC | Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,) |
| PCC                      | 70 | PCC | Program Core Courses   |
| PEC                      | 18 | PEC | Program Elective Courses   |
| OEC                      | 9  | OEC | Open Elective Courses  |
| P/I                      | 12 | P/I | Major Project/Technical Seminar/Internship                                   |
| <b>Total Credits 161</b> |    |     |  |



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## Request for Approval of Programme Structure - Academic Year 2021-22 (2021-Scheme) - Electronics and Communication Engineering

C P Ravikumar <ravikumar@ti.com>  
To: Chairman ECE <chairman-ece@dsu.edu.in>

Mon, May 03, 2021 at 16:39 PM

Dear Sir,  
Approved from my side.

Thanks and regards

Mr. C P Ravikumar,  
Design Engineer, Texas Instrument, Bangalore

On Mon, 03 May, 2021 at 16:39AM Chairman ECE <chairman-ece@dsu.edu.in> wrote:

Dear Sir/Mam,

I hope this email finds you well. I am writing to formally submit the proposed Programme Structure for the Academic Year 2021-22, specifically for the Electronics and Communication Engineering department, based on the 2021-Scheme.

We have diligently crafted the proposed Programme Structure, taking into account the evolving landscape of the field and the feedback received from our esteemed faculty members. The changes introduced aim to enhance the overall learning experience and ensure the relevance of our curriculum to the current industry demands.

We kindly request your review and approval of the proposed Programme Structure. Your feedback and insights are highly valuable to us, and we are open to making any necessary adjustments to meet the department's expectations.



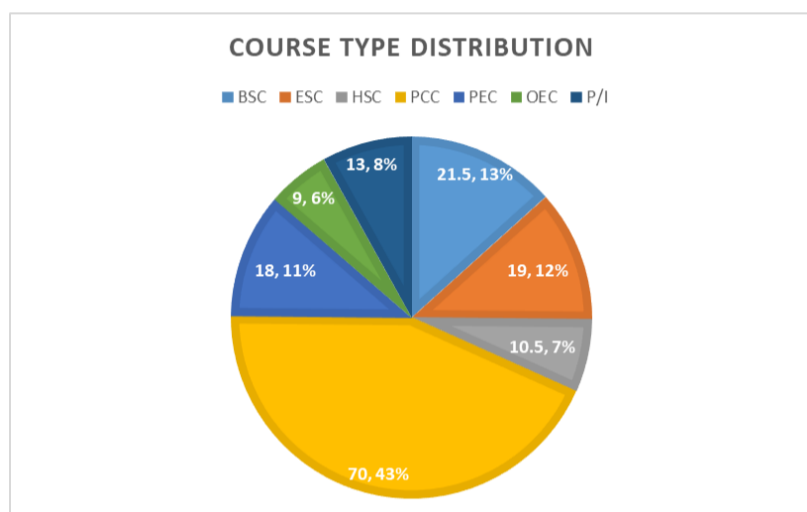
### Department of Electronics And Communication Engineering Programme Structure for Academic Year 2021-22 (2021-Scheme)

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21EN1103	BASIC ELECTRICAL ENGINEERING	3	ESC	21EN1109	BASIC ELECTRONICS	4	ESC	21EC2303	DIGITAL SYSTEM DESIGN WITH VERILOG	4	PCC	21EC2403	MICROCONTROLLERS	4	PCC
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21EN1107	KANNADA KALI/MANASU	1		21EN1113	TECHNICAL COMMUNICATION	2	ESC								
				21EN1114	DESIGN THINKING	1									
				21AU0004	CONSTITUTION OF INDIA AND ETHICS	0									
<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>20</b>		<b>TOTAL</b>		<b>20</b>	

V Sem				VI Sem				VII Sem				VIII Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
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21EC3502	PROBABILITY THEORY AND STOCHASTIC PROCESSES	4	PCC	21EC3602	NETWORKING AND COMMUNICATION	4	PCC	21EC4702	ANTENNAS AND WAVE PROPAGATION	4	PCC	21EC4801	PROJECT STAGE – II	10	P/I
21EC3503	CMOS VLSI DESIGN	4	PCC	21EC3603	POWER ELECTRONICS	4	PCC	21EC47XX	PROGRAM ELECTIVE – IV	3	PEC				
21EC3504	DIGITAL SIGNAL PROCESSING	4	PCC	21EC36XX	PROGRAM ELECTIVE -II	3	PEC	21EC47XX	PROGRAM ELECTIVE – V	3	PEC				
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21EC3505	SPECIAL INITIATIVES – III	2	PCC												

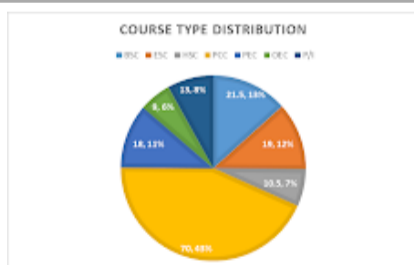
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- BSC 20
- ESC 16
- HSC 14
- PCC 70
- PEC 18
- OEC 9
- P/I 12

- BSC Basic Sciences (Subjects such as Physics, Chemistry, Maths)
- HSC Humanities Sciences
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**Total Credits 161**

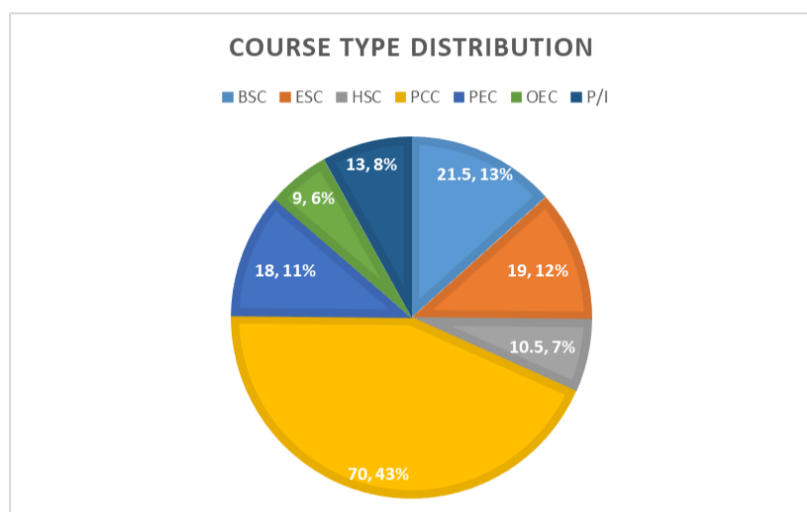


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21EC3502	PROBABILITY THEORY AND STOCHASTIC PROCESSES	4	PCC	21EC3602	NETWORKING AND COMMUNICATION	4	PCC	21EC4702	ANTENNAS AND WAVE PROPAGATION	4	PCC	21EC4801	PROJECT STAGE – II	10	P/I
21EC3503	CMOS VLSI DESIGN	4	PCC	21EC3603	POWER ELECTRONICS	4	PCC	21EC47XX	PROGRAM ELECTIVE – IV	3	PEC				
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21EC3505	SPECIAL INITIATIVES – III	2	PCC												

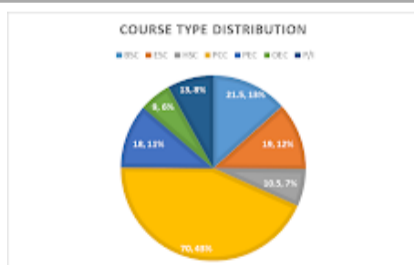
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- BSC 20
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- P/I Major Project/Technical Seminar/Internship

**Total Credits 161**



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## Request for Approval of Programme Structure - Academic Year 2021-22 (2021-Scheme) - Electronics and Communication Engineering

Santhosh Adinarayan <Santhosh.Adinarayan@maximintegrated.com>  
To: Chairman ECE <chairman-ece@dsu.edu.in>

Mon, May 03, 2021 at 16:39 PM

Dear Sir,  
Approved from myside.

Thanks and regards  
Mr. Santhosh Adinarayana,  
Maxim Integrated India Pvt Ltd

On Mon, 03 May, 2021 at 16:39AM Chairman ECE <chairman-ece@dsu.edu.in> wrote:

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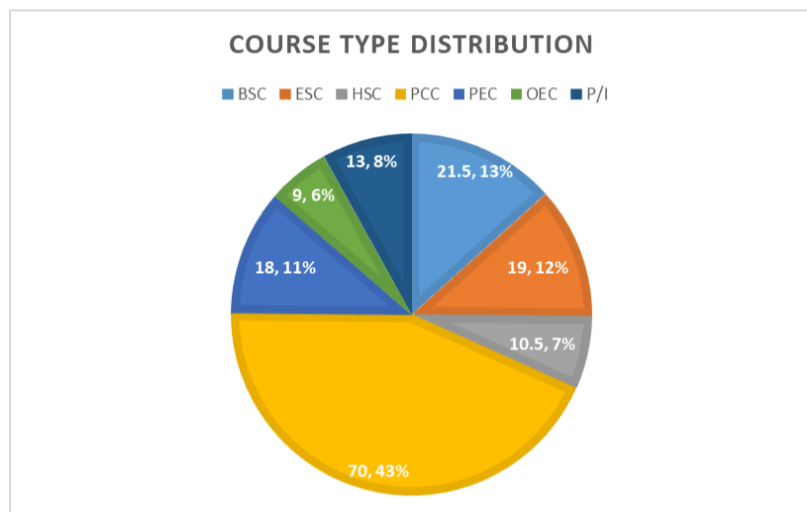
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21EN1103	BASIC ELECTRICAL ENGINEERING	3	ESC	21EN1109	BASIC ELECTRONICS	4	ESC	21EC2303	DIGITAL SYSTEM DESIGN WITH VERILOG	4	PCC	21EC2403	MICROCONTROLLERS	4	PCC
21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	3	ESC	21EN1110	ENGINEERING GRAPHICS AND DESIGN	3	HSC	21EC2304	NETWORK ANALYSIS	4	PCC	21EC2404	ELECTROMAGNETIC WAVES	4	PCC
21EN1105	FUNDAMENTALS OF PROGRAMMING	5	HSC	21EN1111	ENGINEERING MECHANICS	2	HSC	21ENC001	ENGINEERING ECONOMICS	2	HSC	21ENC002	LAW FOR ENGINEERS	2	HSC
21EN1106	ENVIRONMENTAL SCIENCES	2	ESC	21EN1112	BIOLOGICAL SCIENCES	2	ESC	21EC2305	SPECIAL INITIATIVES – I	2	PCC	21EC2405	SPECIAL INITIATIVES – II	2	PCC
21EN1107	KANNADA KALI/MANASU	1		21EN1113	TECHNICAL COMMUNICATION	2	ESC								
				21EN1114	DESIGN THINKING	1									
				21AU0004	CONSTITUTION OF INDIA AND ETHICS	0									
<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>20</b>		<b>TOTAL</b>		<b>20</b>	

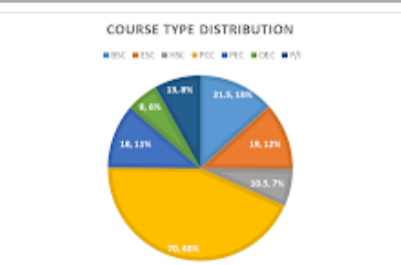
V Sem				VI Sem				VII Sem				VIII Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21EC3501	ANALOG AND DIGITAL COMMUNICATION	4	PCC	21EC3601	RF AND MICROWAVE COMMUNICATION	4	PCC	21EC4701	ROBOTICS AND CONTROL SYSTEMS	4	PCC	21EC48XX	PROGRAM ELECTIVE – VI	3	PEC

21EC3502	PROBABILITY THEORY AND STOCHASTIC PROCESSES	4	PCC	21EC3602	NETWORKING AND COMMUNICATION	4	PCC	21EC4702	ANTENNAS AND WAVE PROPAGATION	4	PCC	21EC4801	PROJECT STAGE – II	10	P/I
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21EC3504	DIGITAL SIGNAL PROCESSING	4	PCC	21EC36XX	PROGRAM ELECTIVE -II	3	PEC	21EC47XX	PROGRAM ELECTIVE – V	3	PEC				
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21EC3505	SPECIAL INITIATIVES – III	2	PCC												

<b>TOTAL</b>	<b>24</b>		<b>TOTAL</b>	<b>21</b>		<b>TOTAL</b>	<b>19</b>		<b>TOTAL</b>	<b>13</b>
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- |     |    |     |  |
|-----|----|-----|--|
| BSC | 20 | BSC | Basic Sciences (Subjects such as Physics, Chemistry, Maths)                  |
| ESC | 16 | HSC | Humanities Sciences  |
| HSC | 14 | ESC | Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,) |
| PCC | 70 | PCC | Program Core Courses   |
| PEC | 18 | PEC | Program Elective Courses   |
| OEC | 9  | OEC | Open Elective Courses  |
| P/I | 12 | P/I | Major Project/Technical Seminar/Internship                                   |
- Total Credits 161**



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# DAYANANDA SAGAR UNIVERSITY

## School of Engineering

Kudlu Gate, Hosur Main Road,  
Bengaluru-560068

### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### Proceedings of the BoS Meeting Held on 24<sup>th</sup> April 2021

School	: School Of Engineering
College	: Dayananda Sagar University
Programme/Department	: Electronics and Communication Engineering
Mode of BOS Meeting	: Hybrid ( <a href="https://meet.google.com/rbw-zobu-usq?authuser=0">https://meet.google.com/rbw-zobu-usq?authuser=0</a> )
Date	: 24 <sup>th</sup> April 2021
Venue	: 3 <sup>rd</sup> Floor, Board Room, A Block
Time	: 02:00 PM to 5: 00 PM

#### AGENDA

**Agenda 1:** Approval of curriculum and syllabus for B. Tech (ECE) 2021-25.

**Agenda 2:** Approval of curriculum and syllabus for M. Tech (Embedded Systems) 2021-23.

**Agenda 3:** Approval of curriculum and syllabus for B. Voc (Mechatronics) 2021-24.

#### PROCEEDINGS:

The Board of Studies (BoS) meeting for Electronics and Communication Engineering was convened on April 24, 2021 at 2:00 PM in the A-Block Board Room. Several members were present in person, while a few joined virtually through the Google Meet platform. The meeting aimed to discuss and deliberate on various matters related to the department's program structure, curriculum, courses, and educational initiatives.

- ✓ Chairman welcomed all the External and Internal BOS Members.
- ✓ Chairman briefed about the agenda of meeting.
- ✓ Chairman briefed about the syllabus of B. Tech (2021-25), MTech (2021-23) and B.Voc (2021-24) and the feedback from the BoS members were noted.
- ✓ Ms. Shweta M P of the department noted the minutes of the meeting and readout the complete BOS proceedings.
- ✓ Chairman of the Department proposed vote of thanks for the valuable inputs given by the External BOS Members and faculty members.

## Recommendation

### > CORE COURSES

SLNo	Semester	Subject Title	Suggestions by the BOS Committee
1.	3 <sup>rd</sup>	Signals and Systems	<ul style="list-style-type: none"><li>• Introduction to digital computer simulation using MATLAB can be included in the 5th module.</li></ul>
2.	4 <sup>th</sup>	Analog Circuits	<ul style="list-style-type: none"><li>• Change the subject name to Analog "electronics" circuits.</li><li>• Course objectives and outcomes with Bloom's action verb need to be reframed.</li><li>• Diode module covered in basic electronics can be removed.</li><li>• Module 1 may start with Load line analysis for BJT.</li><li>• Module 2 can be for MOSFETS.</li><li>• Module 3 can start with the internal stages of Op-amps and do the design-level treatment.</li><li>• The current mirror is missing.</li></ul>

- In response to challenges in comprehending core ECE subjects, we propose offering students orientation through industry-led technical talks and additional practical sessions utilizing simulation tools. Notably, the Board of Studies (BoS) recommends integrating core course topics as skill enhancement courses in the curriculum for 2021-2025.
- Prioritize the inclusion of industry-relevant topics within each course's curriculum.
- Formulate course objectives that prominently feature emerging areas within each subject.
- Provide each course with the flexibility to incorporate industrial requisites.
- External Board of Studies (BoS) members recommended that faculty members refer to journals and publications from the IEEE Educational Society while structuring the syllabus, or consider utilizing beginner's guides for teaching engineering courses.

### > INTERNSHIP

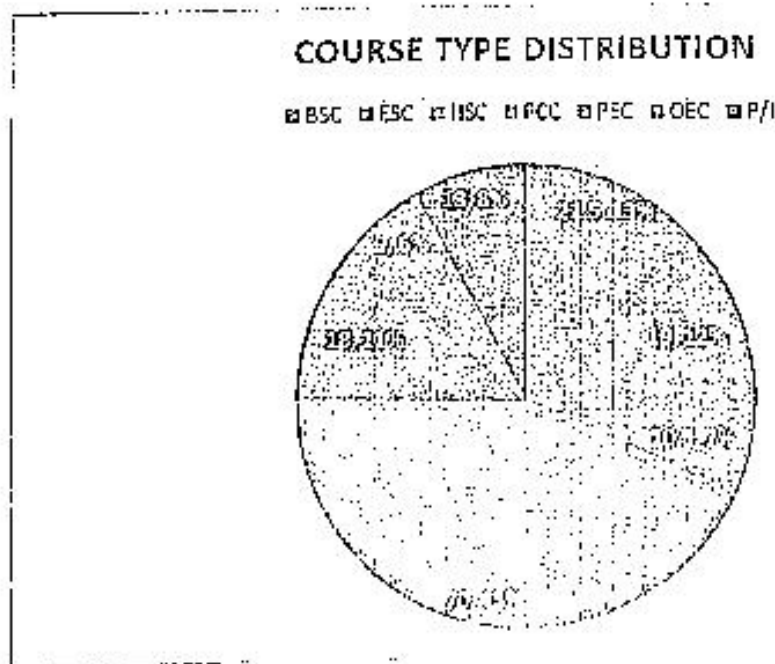
- The External Board of Studies (BoS) members have advised that the inclusion of internships in the curriculum for 2021-2025 is highly advantageous for students. This initiative aligns with industry interests, enabling them to nurture and enhance students' expertise, provide thorough guidance, and ultimately cultivate a skilled talent pool for future recruitment.

- Students can publish SCI indexed publications as an integral aspect of their internship, following the model employed by esteemed institutions such as IITs.

### Professional Elective courses/ Open Electives:

- The selection of domains offered within Professional Elective courses and Open Electives is determined by the Department's faculty expertise.
- Elective courses should possess a distinct standalone nature when compared to core courses.
- To enhance the variety of choices, the list of Open Electives available in the curriculum for 2021-2025 can be expanded by incorporating a broader selection of courses.
- Courses such as Quantum Computing, Quantum Communication, Quantum Information Technology, Energy & Environment, Sustainable Engineering, and Future Directions in Technology can be integrated into the Professional Elective courses and Open Electives offerings.
- The course on Optical Communication, currently offered as a Professional Elective, can be elevated to the status of a core course within the curriculum.
- The Board of Studies (BoS) members have recommended formulating proposals for emerging areas by envisioning the future of Electronics and Communication over the next decade. This proactive approach should include a comparative analysis with foreign universities and institutes of national importance, aligned with the principles outlined in the National Education Policy (NEP)

### Program Structure (2021-2025 Scheme)



**Total Credits - 161**

BSC	Basic Sciences (Subjects such as Physics, Chemistry, Maths)
HSC	Humanities Sciences
ESC	Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPPS, etc.,)
IPCC/PCC	Integrated Program Core Courses / Program Core Courses
PEC	Program Elective Courses
OEC	Open Elective Courses
SEC/AEC	Skill Enhancement Courses / Ability Enhancement Courses
P/I	Major Project/Technical Seminar/Internship

**UG: 7<sup>th</sup> and 8<sup>th</sup> Semester – 2021-25 Course Matrix**

Sl.No	Semester	Subject Title	Suggestions by the BOS Committee
1.	7 <sup>th</sup>	ROBOTICS AND AUTOMATION	Syllabus contents reduced to match with the credits
2.	7 <sup>th</sup>	ANTENNAS AND WAVE PROPAGATION	<ul style="list-style-type: none"> <li>Syllabus contents modified and integrated practical components introduced in the new syllabus.</li> <li>LTPC adjustment within 4 credits is done as follows</li> <li>L-3, T-0, P-2, C-4</li> </ul>
Open Elective			
3.	5 <sup>th</sup> /6 <sup>th</sup> /7 <sup>th</sup>	Automotive Embedded Systems	Modify the course contents for 39 hours.
4.	5 <sup>th</sup> /6 <sup>th</sup> /7 <sup>th</sup>	Evolution of Telecom	Modify the course contents for 39 hours.
5.	5 <sup>th</sup> /6 <sup>th</sup> /7 <sup>th</sup>	MEMS/NEMS	<p>Introduction of new open elective course:</p> <ul style="list-style-type: none"> <li>BoS Committee members suggested to modify the title to Micro &amp; Nano Electromechanical System. A course on Nanotechnology and its Applications can be offered as open elective.</li> </ul>

➤ **Additional Suggestions from BoS Members:**

- Courses on Advanced Excel, EV Technology, Battery Management can be included.
- University can register in I-stem/HISC to make use of licensed software facilities.
- Recommended for approval to meet the Statutory Regulatory Authorities requirement

**Credits Adjustment:**

In adherence with AICTE norms, an increase of 1 credit has been proposed to Project Phase - I so that overall credit allocation for B. Tech (ECE) 2021-25 is increased from 159 to 161 credits.

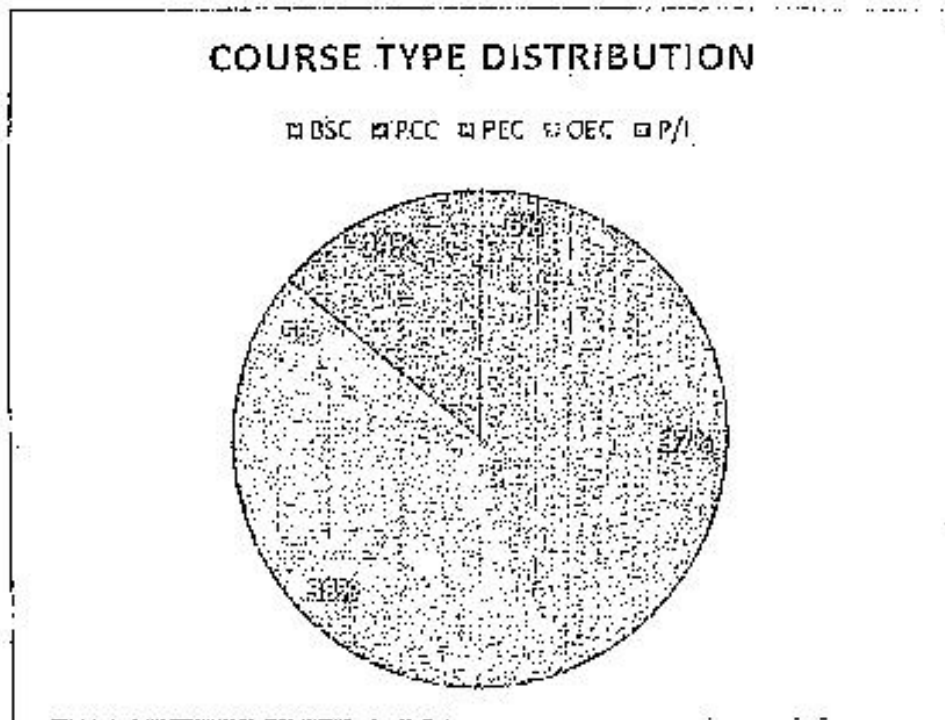
Sl.No	Course	Semester	Existing Credits	Proposed Credits
1	Project Phase -I	7 <sup>th</sup>	2	3

Recommended for approval to meet the Statutory Regulatory Authorities requirement.

This modification is proposed to enhance research exposure, presentation skills, and project rigor.

Recommended for approval to meet the Statutory Regulatory Authorities requirements.

### Program Structure M.Tech (2021-2023 Scheme)



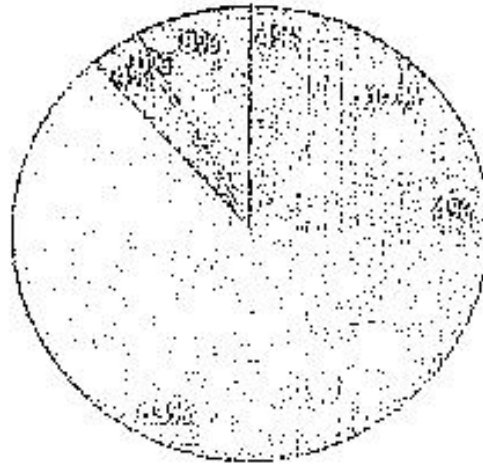
Total Credits – 64

<b>BSC</b>	Basic Sciences (Subjects such as Physics, Chemistry, Maths)
<b>HSC</b>	Humanities Sciences
<b>ESC</b>	Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)
<b>IPCC/PCC</b>	Integrated Program Core Courses / Program Core Courses
<b>PEC</b>	Program Elective Courses
<b>OEC</b>	Open Elective Courses
<b>SEC/AEC</b>	Skill Enhancement Courses / Ability Enhancement Courses
<b>P/I/Sem</b>	Major Project/Technical Seminar/Internship

Program Structure B.Voc. (2021-2024 Scheme).




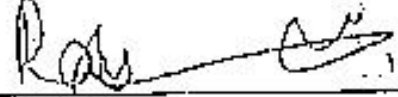

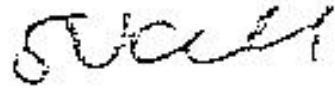


**COURSE TYPE DISTRIBUTION**

■ BSC ■ ESC ■ HSC ■ IPCC ■ PEC ■ OEC ■ P/I



<b>BSC</b>	Basic Sciences (Subjects such as Physics, Chemistry, Maths)
<b>HSC</b>	Humanities Sciences
<b>ESC</b>	Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)
<b>IPCC/PCC</b>	Integrated Program Core Courses / Program Core Courses
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<b>OEC</b>	Open Elective Courses
<b>SEC/AEC</b>	Skill Enhancement Courses / Ability Enhancement Courses
<b>P/I/Sem</b>	Major Project/Technical Seminar/Internship

**BOS Members:**

Sl. No	Name	Signatures
1	Dr. Pottamadappa C Registrar and Professor Department of ECE, DSU. Email: registrar@dsu.edu.in	
2	Dr. Vaibhay Mesharam Chairman Department of ECE, SOE, DSU Email: chairman-ecce@dsu.edu.in	
3	Dr. Theodore Chandra S Associate Professor, Department of ECE, SOE, DSU	
4	Dr. Ravish Aradhya H V, Professor, Dept. of ECE, RVCE, Bangalore.	
5	Dr. C P Ravikumar Design Engineer; Texas Instrument, Bangalore Email: ravikumar@ti.com	ONLINE <a href="https://meet.google.com/ffi-bgery-dzw">meet.google.com/ffi-bgery-dzw</a>
6	Mr. Santhosh Adinarayana Maxim Integrated India Pvt Ltd.	
7	Dr. Narasimha Kaulgad Professor, NIE, Mysore.	
8	Gibson M NTTF	ONLINE <a href="https://meet.google.com/ffi-bgery-dzw">meet.google.com/ffi-bgery-dzw</a>
9	Kalpana NTTF	ONLINE <a href="https://meet.google.com/ffi-bgery-dzw">meet.google.com/ffi-bgery-dzw</a>
10	Dr. Pushpa P.V Professor, Department of ECE, SOE, DSU Email: pushpa-ecce@dsu.edu.in	
11	Dr. Arungalai Vendan Professor, Department of ECE, SOE, DSU Email: arungalai-ecce@dsu.edu.in	



Signature of Chairman of BOS  
Department of Electronics and Communication Engineering  
School of Engineering  
Dayananda Sagar University - Bangalore-560068

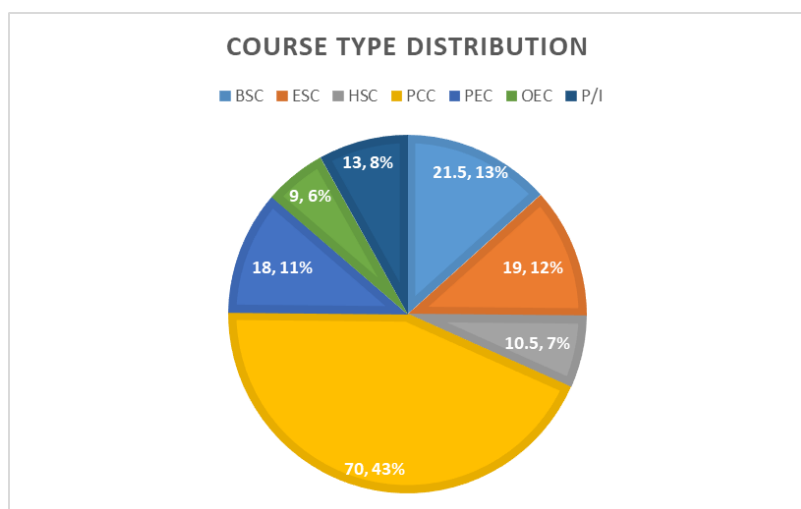
List of Enclosures based on the Decisions/Resolutions/Recommendations submitted:

Enclosure	Particulars
1	B.Tech-Syllabus and Programme structure for 2021-25
2	M.Tech-Syllabus and Programme structure for 2021-23
3	B.Voc-Syllabus and Programme structure for 2021-24

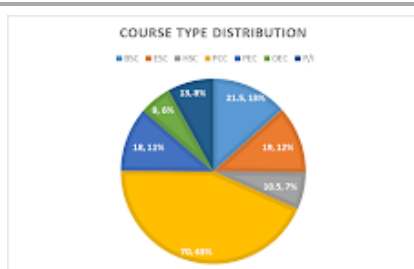


21EC3502	PROBABILITY THEORY AND STOCHASTIC PROCESSES	4	PCC	21EC3602	NETWORKING AND COMMUNICATION	4	PCC	21EC4702	ANTENNAS AND WAVE PROPAGATION	4	PCC	21EC4801	PROJECT STAGE – II	10	P/I
21EC3503	CMOS VLSI DESIGN	4	PCC	21EC3603	POWER ELECTRONICS	4	PCC	21EC47XX	PROGRAM ELECTIVE – IV	3	PEC				
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21EC3505	SPECIAL INITIATIVES – III	2	PCC												

<b>TOTAL</b>	<b>24</b>		<b>TOTAL</b>	<b>21</b>		<b>TOTAL</b>	<b>19</b>		<b>TOTAL</b>	<b>13</b>
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- BSC 20 Basic Sciences (Subjects such as Physics, Chemistry, Maths)
  - ESC 16 Humanities Sciences
  - HSC 14 Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)
  - PCC 70 Program Core Courses
  - PEC 18 Program Elective Courses
  - OEC 9 Open Elective Courses
  - P/I 12 Major Project/Technical Seminar/Internship
- Total Credits 161**



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## Request for Approval of Programme Structure - Academic Year 2021-22 (2021-Scheme) - Electronics and Communication Engineering

C P Ravikumar <ravikumar@ti.com>  
To: Chairman ECE <chairman-ece@dsu.edu.in>

Mon, May 03, 2021 at 16:39 PM

Dear Sir,  
Approved from my side.

Thanks and regards

Mr. C P Ravikumar,  
Design Engineer, Texas Instrument, Bangalore

On Mon, 03 May, 2021 at 16:39AM Chairman ECE <chairman-ece@dsu.edu.in> wrote:

Dear Sir/Mam,

I hope this email finds you well. I am writing to formally submit the proposed Programme Structure for the Academic Year 2021-22, specifically for the Electronics and Communication Engineering department, based on the 2021-Scheme.

We have diligently crafted the proposed Programme Structure, taking into account the evolving landscape of the field and the feedback received from our esteemed faculty members. The changes introduced aim to enhance the overall learning experience and ensure the relevance of our curriculum to the current industry demands.

We kindly request your review and approval of the proposed Programme Structure. Your feedback and insights are highly valuable to us, and we are open to making any necessary adjustments to meet the department's expectations.



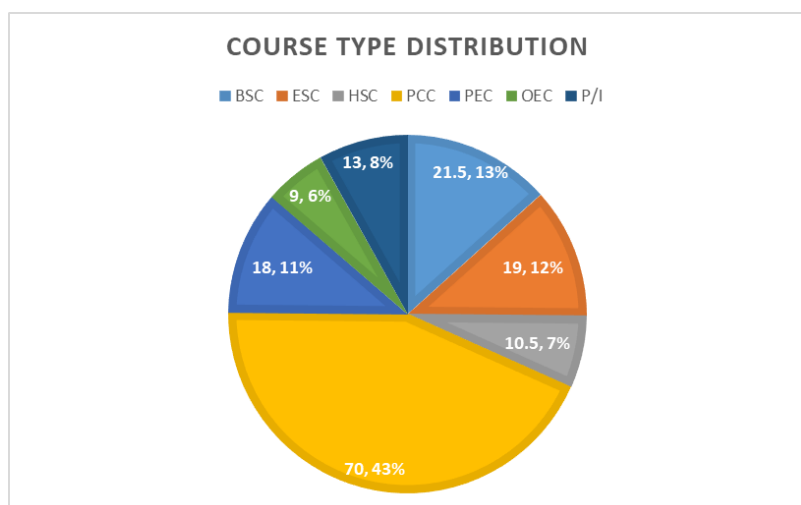
### Department of Electronics And Communication Engineering Programme Structure for Academic Year 2021-22 (2021-Scheme)

I Sem				II Sem				III Sem				IV Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21EN1101	LINEAR ALGEBRA AND CALCULUS	4	BSC	21EN1201	TRANSFORMS AND DIFFERENTIAL EQUATIONS	4	BSC	21EC2301	ENGINEERING MATHEMATICS – III – ECE	4	BSC	21EC2401	SIGNALS AND SYSTEMS	4	PCC
21EN1102	ENGINEERING CHEMISTRY	4	BSC	21EN1108	ENGINEERING PHYSICS	4	BSC	21EC2302	ANALOG CIRCUITS	4	PCC	21EC2402	COMPUTER SYSTEM ARCHITECTURE	4	PCC
21EN1103	BASIC ELECTRICAL ENGINEERING	3	ESC	21EN1109	BASIC ELECTRONICS	4	ESC	21EC2303	DIGITAL SYSTEM DESIGN WITH VERILOG	4	PCC	21EC2403	MICROCONTROLLERS	4	PCC
21EN1104	ELEMENTS OF MECHANICAL ENGINEERING	3	ESC	21EN1110	ENGINEERING GRAPHICS AND DESIGN	3	HSC	21EC2304	NETWORK ANALYSIS	4	PCC	21EC2404	ELECTROMAGNETIC WAVES	4	PCC
21EN1105	FUNDAMENTALS OF PROGRAMMING	5	HSC	21EN1111	ENGINEERING MECHANICS	2	HSC	21ENC001	ENGINEERING ECONOMICS	2	HSC	21ENC002	LAW FOR ENGINEERS	2	HSC
21EN1106	ENVIRONMENTAL SCIENCES	2	ESC	21EN1112	BIOLOGICAL SCIENCES	2	ESC	21EC2305	SPECIAL INITIATIVES – I	2	PCC	21EC2405	SPECIAL INITIATIVES – II	2	PCC
21EN1107	KANNADA KALI/MANASU	1		21EN1113	TECHNICAL COMMUNICATION	2	ESC								
				21EN1114	DESIGN THINKING	1									
				21AU0004	CONSTITUTION OF INDIA AND ETHICS	0									
<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>20</b>		<b>TOTAL</b>		<b>20</b>	

V Sem				VI Sem				VII Sem				VIII Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
21EC3501	ANALOG AND DIGITAL COMMUNICATION	4	PCC	21EC3601	RF AND MICROWAVE COMMUNICATION	4	PCC	21EC4701	ROBOTICS AND CONTROL SYSTEMS	4	PCC	21EC48XX	PROGRAM ELECTIVE – VI	3	PEC

21EC3502	PROBABILITY THEORY AND STOCHASTIC PROCESSES	4	PCC	21EC3602	NETWORKING AND COMMUNICATION	4	PCC	21EC4702	ANTENNAS AND WAVE PROPAGATION	4	PCC	21EC4801	PROJECT STAGE – II	10	P/I
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21EC3505	SPECIAL INITIATIVES – III	2	PCC												

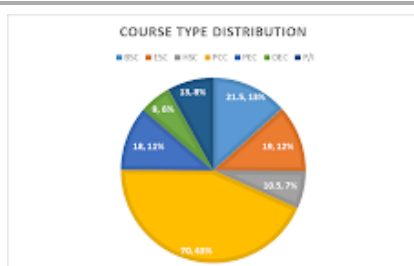
<b>TOTAL</b>	<b>24</b>		<b>TOTAL</b>	<b>21</b>		<b>TOTAL</b>	<b>19</b>		<b>TOTAL</b>	<b>13</b>
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- BSC 20
- ESC 16
- HSC 14
- PCC 70
- PEC 18
- OEC 9
- P/I 12

**Total Credits 161**

- BSC Basic Sciences (Subjects such as Physics, Chemistry, Maths)
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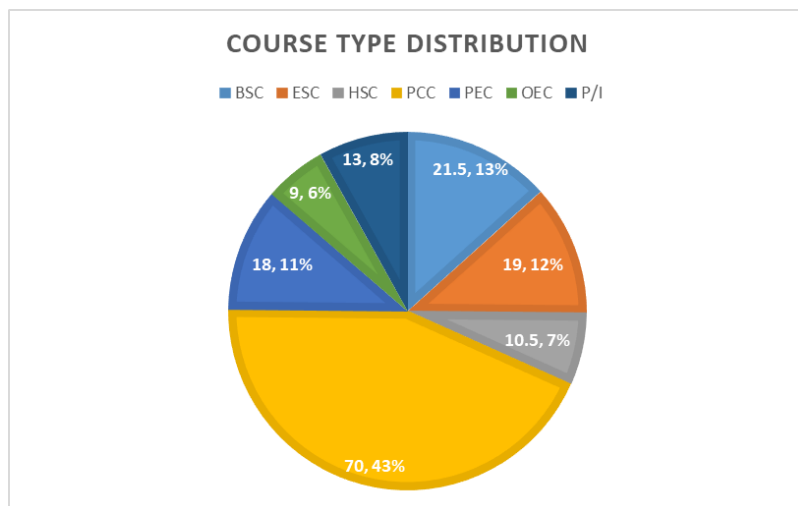


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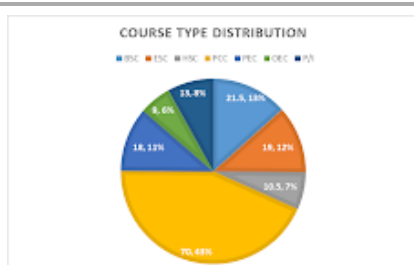
<b>TOTAL</b>	<b>24</b>		<b>TOTAL</b>	<b>21</b>		<b>TOTAL</b>	<b>19</b>		<b>TOTAL</b>	<b>13</b>
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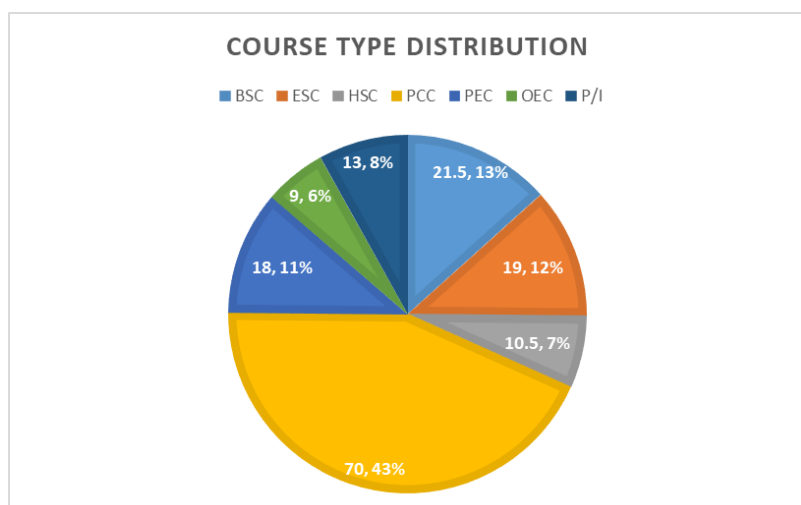


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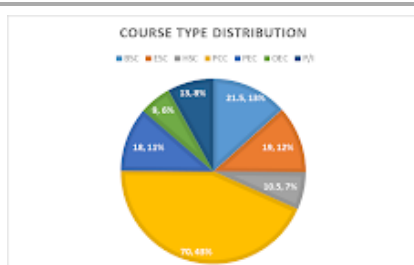


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- BSC 20 Basic Sciences (Subjects such as Physics, Chemistry, Maths)
  - ESC 16 Humanities Sciences
  - HSC 14 Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)
  - PCC 70 Program Core Courses
  - PEC 18 Program Elective Courses
  - OEC 9 Open Elective Courses
  - P/I 12 Major Project/Technical Seminar/Internship
- Total Credits 161**



**PS.png**  
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## Request for Approval of B.Voc (Mechatronics) Programme Structure for Academic Year 2021

Kaipana <gsk@nttf.co.in>

Fri, Jul 21, 2021 at 9:45 AM

To: Chairman ECE <chairman-ece@dsu.edu.in>

Approved from my side.

Thanks and Regards  
Kaipana

On Fri, Jul 21, 2021 at 9:45AM Chairman ECE <chairman-ece@dsu.edu.in > wrote:

Dear Sir/Mam,

I hope this email finds you well. I am writing to formally submit the proposed B.Voc (Mechatronics) Programme Structure for the Academic Year 2021-22.

We kindly request your review and approval of the proposed Programme Structure. Your feedback and insights are highly valuable to us, and we are open to making any necessary adjustments to meet the department's expectations.

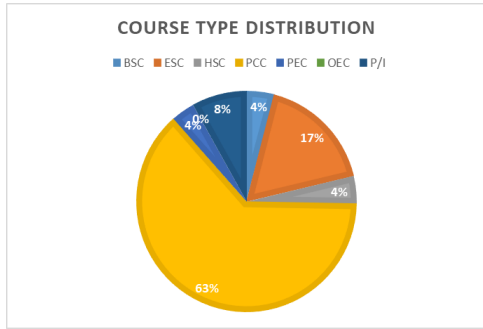


### Department of Electronics And Communication Engineering Programme Structure for 2021 Scheme (B.Voc) Effective from 2021 Onwards

I Sem				II Sem				III Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
18VM101	ENGLISH-I	2	HSC	18VM201	ENGLISH-II	2	HSC	18VM301	DIGITAL ELECTRONICS	3	PCC
18VM102	MATHEMATICS-I	3	BSC	18VM202	MATHEMATICS-II	2	BSC	18VM303	COMPUTER PROGRAMMING – C,C++	3	ESC
18VM103	APPLIED SCIENCE	2	BSC	18VM203	ELECTRONICS – II	2	PCC	18VM311	CONTROL SYSTEMS	2	PCC
18VM104	ELECTRONICS – I	3	PCC	18VM204	ELECTRICAL ENGINEERING SCIENCE	2	ESC	18VM312	INDUSTRIAL ELECTRONICS	2	PCC
18VM105	BASICS OF COMPUTER - I	2	ESC	18VM205	MECHANICAL ENGINEERING	2	PCC	18VM313	MECHANICS OF MACHINES	2	PCC
18VM106	APPLIED SCIENCE LAB	3	ESC	18VM206	METROLOGY	2	PCC	19AU009	ENVIRONMENTAL STUDIES	0	HSC
18VM107	BASICS OF COMPUTERS LAB	3	ESC	18VM207	CADD	5	PCC	18VM306	COMPUTER PROGRAMMING – C,C++ LAB	5	ESC
18VM108	ELECTRONICS LAB – I	4	PCC	18VM208	WORKSHOP PRACTICE - II	5	PCC	18VM308	PCB DESIGN AND FABRICATION LAB	4	PCC
18VM109	WORKSHOP PRACTICE – I	4	PCC	18VM209	ELECTRICAL LAB	4	ESC	18VM310	DIGITAL ELECTRONICS LAB	5	PCC
18VM110	ENGINEERING DRAWING	4	PCC	18VM210	ELECTRONICS LAB-II	4	PCC	18VM314	INDUSTRIAL ELECTRONICS LAB	4	PCC
	<b>TOTAL</b>	<b>30</b>		<b>TOTAL</b>		<b>30</b>		<b>TOTAL</b>		<b>30</b>	

IV Sem				V Sem				VI Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
18VM401	MICRO CONTROLLER & APPLICATIONS	2	PCC	18VM513	EMBEDDED SYSTEM AND IOT	3	PCC	18VM608	INDUSTRIAL MANAGEMENT	3	HSC
18VM404	MEMS	3	PCC	18VM514	PRODUCT DESIGN AND DEVELOPMENT	2	PCC	18VM609	INDUSTRIAL EQUIPMENT MAINTENANCE	3	PCC
18VM411	PYTHON PROGRAMMING	3	ESC	18VM515	CNC TECHNOLOGY	2	PCC	18VM610	ADDITIVE MANUFACTURING	3	PCC
18VM412	PLC	2	PCC	18VM516	ROBOTICS	2	PCC	18VM6XX	ELECTIVE II	3	PEC
18VM413	MEASUREMENT SYSTEMS	2	PCC	18VM5XX	ELECTIVE – I	3	PEC	18VM611	AUTOMOTIVE ELECTRONICS LAB	4	PCC

19AU0004	CONSTITUTION OF INDIA AND PROFESSIONAL ETHICS	0	HSC	19AU0020	KANNADA KALI – I	0	HSC	18VM612	PROJECT PHASE II	8	P/I
18VM410	MICRO CONTROLLER & APLICATIONS LAB	5	PCC	18VM517	EMBEDDED SYSTEM LAB	3	PCC				
18VM414	PYTHON PROGRAMMING LAB	5	ESC	18VM518	CNC TECHNOLOGY LAB	3	PCC				
18VM415	PLC LAB	4	PCC	18VM519	ADVANCED PLC LAB	3	PCC				
18VM416	MEASUREMENT AND INSTRUMENTATION LAB	4	PCC	18VM520	ROBOTICS LAB	3	PCC				
				18VM521	PROJECT PHASE – I	6	P/I				
<b>TOTAL</b>		<b>30</b>		<b>TOTAL</b>		<b>30</b>		<b>TOTAL</b>		<b>24</b>	

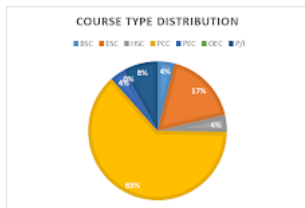


BSC	7
ESC	30
HSC	7
PCC	110
PEC	6
OEC	0
P/I	14
<b>Total Credits</b>	<b>174</b>

BSC  
HSC  
ESC  
PCC  
PEC  
OEC  
P/I

Basic Sciences (Subjects such as Physics, Chemistry, Maths)  
Humanities Sciences  
Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)  
Program Core Courses  
Program Elective Courses  
Open Elective Courses  
Major Project/Technical Seminar/Internship

With regards,  
**Dr. Vaibhav A Meshram**  
Professor and Chairman, ECE  
Dayanand Sagar University,  
Hosur Main Road  
Kudlu Gate  
Bengaluru-560 068  
Cell: 7259108645



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## Request for Approval of B.Voc (Mechatronics) Programme Structure for Academic Year 2021

Gibson M <gibsonm@nttf.co.in>  
To: Chairman ECE <chairman-ece@dsu.edu.in>

Fri, Jul 21, 2021 at 9:40 AM

Approved Programme Structure from my side.

Thanks and Regards  
Gibson

On Fri, Jul 21, 2021 at 9:40AM Chairman ECE <chairman-ece@dsu.edu.in > wrote:

Dear Sir/Mam,

I hope this email finds you well. I am writing to formally submit the proposed B.Voc (Mechatronics) Programme Structure for the Academic Year 2021-22.

We kindly request your review and approval of the proposed Programme Structure. Your feedback and insights are highly valuable to us, and we are open to making any necessary adjustments to meet the department's expectations.

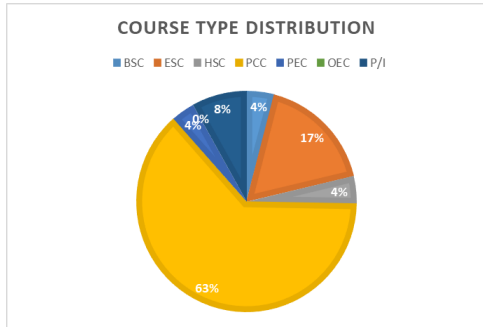


### Department of Electronics And Communication Engineering Programme Structure for 2021 Scheme (B.Voc) Effective from 2021 Onwards

I Sem				II Sem				III Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
18VM101	ENGLISH-I	2	HSC	18VM201	ENGLISH-II	2	HSC	18VM301	DIGITAL ELECTRONICS	3	PCC
18VM102	MATHEMATICS-I	3	BSC	18VM202	MATHEMATICS-II	2	BSC	18VM303	COMPUTER PROGRAMMING – C,C++	3	ESC
18VM103	APPLIED SCIENCE	2	BSC	18VM203	ELECTRONICS – II	2	PCC	18VM311	CONTROL SYSTEMS	2	PCC
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18VM109	WORKSHOP PRACTICE – I	4	PCC	18VM209	ELECTRICAL LAB	4	ESC	18VM310	DIGITAL ELECTRONICS LAB	5	PCC
18VM110	ENGINEERING DRAWING	4	PCC	18VM210	ELECTRONICS LAB-II	4	PCC	18VM314	INDUSTRIAL ELECTRONICS LAB	4	PCC
	<b>TOTAL</b>	<b>30</b>		<b>TOTAL</b>		<b>30</b>		<b>TOTAL</b>		<b>30</b>	

IV Sem				V Sem				VI Sem			
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18VM412	PLC	2	PCC	18VM516	ROBOTICS	2	PCC	18VM6XX	ELECTIVE II	3	PEC
18VM413	MEASUREMENT SYSTEMS	2	PCC	18VM5XX	ELECTIVE – I	3	PEC	18VM611	AUTOMOTIVE ELECTRONICS LAB	4	PCC

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18VM415	PLC LAB	4	PCC	18VM519	ADVANCED PLC LAB	3	PCC				
18VM416	MEASUREMENT AND INSTRUMENTATION LAB	4	PCC	18VM520	ROBOTICS LAB	3	PCC				
				18VM521	PROJECT PHASE – I	6	P/I				
<b>TOTAL</b>		<b>30</b>		<b>TOTAL</b>		<b>30</b>		<b>TOTAL</b>		<b>24</b>	

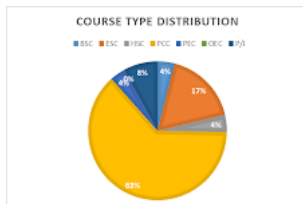


BSC	7
ESC	30
HSC	7
PCC	110
PEC	6
OEC	0
P/I	14
<b>Total Credits</b>	<b>174</b>

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HSC
ESC
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PEC
OEC
P/I

Basic Sciences (Subjects such as Physics, Chemistry, Maths)  
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 Program Core Courses  
 Program Elective Courses  
 Open Elective Courses  
 Major Project/Technical Seminar/Internship

With regards,  
**Dr. Vaibhav A Meshram**  
 Professor and Chairman, ECE  
 Dayanand Sagar University,  
 Hosur Main Road  
 Kudlu Gate  
 Bengaluru-560 068  
 Cell: 7259108645



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## Request for Approval of M.Tech (Embedded Systems) Programme Structure for Academic Year 2021-22

Narasimha Kaulgud <nadeempasha-ece@dsu.edu.in>

Thu, May 03, 2021 at 4:04 PM

To: Chairman ECE <chairman-ece@dsu.edu.in>

I am pleased to inform you that the proposed M.Tech (Embedded Systems) Programme Structure for the academic year 2021 has been reviewed and approved.

Thanks and regards

Dr. Narasimha kaulgud,

Professor, NIE, Mysore

On Mon, May 03, 2021 at 4:04PM Chairman ECE <chairman-ece@dsu.edu.in > wrote:

Dear Sir/Mam,

I hope this email finds you well. I am writing to formally submit the proposed M.Tech (Embedded Systems) Programme Structure for the Academic Year 2021-22, specifically for the M.Tech (Embedded Systems)

We have diligently crafted the proposed M.Tech (Embedded Systems) Programme Structure, taking into account the evolving landscape of the field and the feedback received from our esteemed faculty members. The changes introduced aim to enhance the overall learning experience and ensure the relevance of our curriculum to the current industry demands.

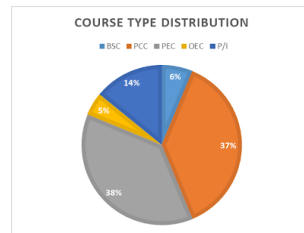
We kindly request your review and approval of the proposed Programme Structure. Your feedback and insights are highly valuable to us, and we are open to making any necessary adjustments to meet the department's expectations.



### Department of Electronics And Communication Engineering Programme Structure for 2021 Scheme (M.Tech-Embedded Systems)

I Sem				II Sem				III Sem				IV Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
20ESE5101	LINEAR ALGEBRA AND OPTIMIZATION TECHNIQUES	4	BSC	20ESE5201	AUTOMOTIVE CONTROL AND SIMULATION	3	PCC	20ESE5XXX	DEPARTMENT ELECTIVE – V	4	PEC	20ESE5XX X	DEPARTMENT ELECTIVE – VI	4	PEC
20ESE5102	MODERN AUTOMOTIVE SYSTEMS	3	PCC	20ESE5202	AUTOMOTIVE POWER ELECTRONICS AND DRIVES	4	PCC	20MOE53XX	OPEN ELECTIVE	3	OEC	20ESE5401	DISSERTATION PHASE 2	6	P/I

20ESE5103	AUTOMOTIVE EMBEDDED SYSTEM	3	PCC	20ESE5203	AUTOMOTIVE SOFTWARE ARCHITECTURE	3	PCC	20ESE5301	DISSERTATION PHASE 1	3	P/I						
20ESE5XXX	DEPARTMENT ELECTIVE – I	4	PEC	20ESE5XXX	DEPARTMENT ELECTIVE – III	4	PEC										
20ESE5XXX	DEPARTMENT ELECTIVE – II	4	PEC	20ESE5XXX	DEPARTMENT ELECTIVE – IV	4	PEC										
20ESE5104	AUTOMOTIVE SYSTEM LAB	2	PCC	20ESE5204	CONTROL AND SIMULATION LAB	2	PCC										
20ESE5105	AUTOMOTIVE EMBEDDED SYSTEMS LAB	2	PCC	20ESE5205	AUTOMOTIVE POWER ELECTRONICS LAB	2	PCC										
<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>10</b>		<b>TOTAL</b>		<b>10</b>			



BSC	4
PCC	24
PEC	24
OEC	3
P/I	9
ESC	0
HSC	0

BSC	Basic Sciences (Subjects such as Physics, Chemistry, Maths)
PCC	Program Core Courses
PEC	Program Elective Courses
OEC	Open Elective Courses
P/I	Major Project/Technical Seminar/Internship
HSC	Humanities Sciences
ESC	Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)

**Total Credits                      64**



## Request for Approval of M.Tech (Embedded Systems) Programme Structure for Academic Year 2021-22

Narasimha Kaulgud <narasimha.kaulgud@nie.ac.in>

Thu, May 03, 2021 at 4:04 PM

To: Chairman ECE <chairman-ece@dsu.edu.in>

I am pleased to inform you that the proposed M.Tech (Embedded Systems) Programme Structure for the academic year 2021 has been reviewed and approved.

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Professor, NIE, Mysore

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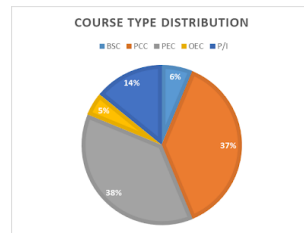
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### Department of Electronics And Communication Engineering Programme Structure for 2021 Scheme (M.Tech-Embedded Systems)

I Sem				II Sem				III Sem				IV Sem			
Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type	Course code	Course Name	Credits	Course type
20ESE5101	LINEAR ALGEBRA AND OPTIMIZATION TECHNIQUES	4	BSC	20ESE5201	AUTOMOTIVE CONTROL AND SIMULATION	3	PCC	20ESE5XXX	DEPARTMENT ELECTIVE – V	4	PEC	20ESE5XX X	DEPARTMENT ELECTIVE – VI	4	PEC
20ESE5102	MODERN AUTOMOTIVE SYSTEMS	3	PCC	20ESE5202	AUTOMOTIVE POWER ELECTRONICS AND DRIVES	4	PCC	20MOE53XX	OPEN ELECTIVE	3	OEC	20ESE5401	DISSERTATION PHASE 2	6	P/I

20ESE5103	AUTOMOTIVE EMBEDDED SYSTEM	3	PCC	20ESE5203	AUTOMOTIVE SOFTWARE ARCHITECTURE	3	PCC	20ESE5301	DISSERTATION PHASE 1	3	P/I						
20ESE5XXX	DEPARTMENT ELECTIVE – I	4	PEC	20ESE5XXX	DEPARTMENT ELECTIVE – III	4	PEC										
20ESE5XXX	DEPARTMENT ELECTIVE – II	4	PEC	20ESE5XXX	DEPARTMENT ELECTIVE – IV	4	PEC										
20ESE5104	AUTOMOTIVE SYSTEM LAB	2	PCC	20ESE5204	CONTROL AND SIMULATION LAB	2	PCC										
20ESE5105	AUTOMOTIVE EMBEDDED SYSTEMS LAB	2	PCC	20ESE5205	AUTOMOTIVE POWER ELECTRONICS LAB	2	PCC										
<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>22</b>		<b>TOTAL</b>		<b>10</b>		<b>TOTAL</b>		<b>10</b>			



BSC	4
PCC	24
PEC	24
OEC	3
P/I	9
ESC	0
HSC	0

BSC	Basic Sciences (Subjects such as Physics, Chemistry, Maths)
PCC	Program Core Courses
PEC	Program Elective Courses
OEC	Open Elective Courses
P/I	Major Project/Technical Seminar/Internship
HSC	Humanities Sciences
ESC	Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)

**Total Credits 64**



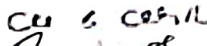
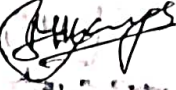


DAYANANDA SAGAR UNIVERSITY  
SCHOOL OF ENGINEERING  
KUDLU GATE, BANGALORE- 560068

Department of Computer Application

BOS Meeting Held on 24-06-2021

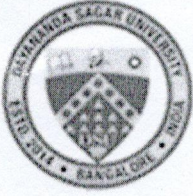
Proceedings of the Meeting

Members Present :

i)	Dr. Manjunath M B	Member	
ii)	Dr. M K Banga	Member	
iii)	Dr. Sanjay Chitnis	Member	
iv)	Dr. Vasanthi Kumari P	Chairman	

Points Discussed and Observations:

- i) Deliberated on the scheme of the Core courses of 3 year BCA Programme for Regulations 2021
  - a. The members were given the details of the draft Syllabus of I and II semesters BCA Programme in the scheme. The members suggested changes in the draft scheme and syllabus.
  - b. Members have suggested to follow the NEP and make the 4 year BCA degree with the students willing to leave the programme at the end of the following years as:
    - First year end will be awarded with a certificate as completed the courses in the I and II semester.
    - Second year end will be awarded with a Diploma certificate in BCA
    - Third year end with the Degree in BCA
    - Fourth year where students go through the different course verticals will be awarded with the BCA degree with Hons
  - c. Members felt that the challenge of the BCA course and the syllabus must be designed for the current technology which will go along with the placement of students. They also suggested the core and elective areas for placements such as Big Data and Data Science, Full Stack development, Computational intelligence and cloud computing.
  - d. The department electives were discussed and finalized.
  - e. The I, II and III semester of BCA will have the compulsory core courses.
  - f. The IV semester of BCA will have one departmental elective, V and VI semesters of BCA will have two departmental electives where the students can select the electives out of options given.
  - g. The syllabi of all the core courses and the Labs were presented one after another.



**DAYANANDA SAGAR UNIVERSITY**  
**SCHOOL OF ENGINEERING**  
**KUDLU GATE, BANGALORE- 560068**

- ii) Deliberated on the scheme of the Core courses of BCA in Computer Applications of V and VI Semesters of Regulations 2019 and of III and IV Semesters of Regulations 2020
- The members were given the details of the draft syllabus of III and IV semesters of BCA incorporated in the scheme. The members suggested changes in the draft syllabus.
  - The members were given the details of the draft syllabus of V and VI semesters of BCA incorporated in the scheme. The members suggested changes in the draft syllabus.
  - Members felt that the challenge of the BCA course and the syllabus must be designed for the current technology which will go along with th
  - e placement of students. They also suggested the two core areas for placements are the mobile technology and cloud computing.
  - The syllabi of all the core courses and the Labs were presented one after another.
  - Members proposed that the Agile process text book should be added to “Software engineering” course.
  - Members suggested to include the elective “Blockchain technologies”.
  - Members suggested to include the vertical courses such as Full Stack development, System/Network Administration with cloud computing and Enterprise Computing with IOT and Data Analytics in the 4<sup>th</sup> year.
- iii) Members suggested and recommended to encourage students with sound theoretical background to take up projects in Industry.
- iv) Program Structure is discussed for all the semesters of BCA and is approved by all the BoS members.
- v) Action Taken on Feedback Analysis: The feedback collected from students, Alumni have given positive feedback and it was suggested to include more advanced technologies in the curriculum. In the forthcoming syllabus we are planning to add more advanced technologies will be incorporated in the curriculum.

**Decisions taken :**

- The modified syllabi of the courses in I and II Semesters of BCA were approved. This will be circulated among the members for their concurrence. Details are in Annexure – I.
- The modified syllabi of the courses in III, IV, V and IV Semesters of BCA were approved. This will be circulated among the members for their concurrence. Details are in Annexure – I.
- Decided to include the vertical courses such as Full Stack development, System/Network Administration with cloud computing and Enterprise Computing with IOT and Data Analytics in the 4<sup>th</sup> year of study. Details are in Annexure – I.

cee s ceerll  
Arav R. Chitto

( Dr. Vasanthi Kumari P )  
Chairman,  
BoS in Computer Applications



**DAYANANDA SAGAR UNIVERSITY**  
School of Engineering

**DEPARTMENT OF COMPUTER APPLICATIONS**

( 2021-22 )

I SEM

S L	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				SEM / P	C	SEM	PREREQUISITE COURSE CODE
					L	T	P	S				
1	106	21CA1101	MATHEMATICS-1	CR	03	01	--	--	04	***	***	
2	106	21CA1102	FUNDAMENTALS OF PROGRAMMING	CR	03	--	--	--	03	***	***	
3	106	21CA1103	COMPUTER ORGANIZATION - I	CR	03	--	--	--	03	***	***	
4	106	21CA1104	WEB PROGRAMMING	CR	03	--	02	--	04	***	***	
5	106	21CA1105	ACCOUNTING AND FINANCIAL MANAGEMENT	CR	03	--	02	--	04	***	***	
6	106	21CA1106	ENGLISH IN PRACTICE	CR	02	--	02	--	03	***	***	
7	106	21CA1107	PROGRAMMING LAB	CR	-	-	02	--	01	***	***	
8	106	21CA1108	COMPUTER ORGANIZATION LAB	CR	-	-	02	--	01	***	***	
					<b>16</b>	<b>01</b>	<b>10</b>	<b>--</b>	<b>23</b>			
9	106	21AU0004	CONSTITUTION OF INDIA AND PROFESSIONAL ETHICS	AU	02	--	--	--	***	***	***	

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

*[Handwritten Signature]*

*ce s ce 11*

*Dr R Chitra*

**Chairperson**

Department of Computer Applications  
School of Engineering  
Dayananda Sagar University  
Kudlu Gate, 17th Main Road  
Bangalore - 560114

*[Handwritten Signature]*

*Dr MK Bangar*





**DAYANANDA SAGAR UNIVERSITY**  
School of Engineering

**DEPARTMENT OF COMPUTER APPLICATIONS**

**III SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					SEM	PREREQUISITE COURSE CODE
					L	T	P	S / P	C		
1	106	21CA2301	COMPUTER NETWORKS	CR	03	--	02	--	04	***	***
2	106	21CA2302	HUMAN COMPUTER INTERFACE	CR	03	--	02	--	04	***	***
3	106	21CA2303	SOFTWARE ENGINEERING USING AGILE APPROACH	CR	03	--	02	--	04	***	***
4	106	21CA2304	NUMERICAL METHODS	CR	03	--	02	--	04	***	***
5	106	21CA2305	ANALYSIS AND DESIGN OF ALGORITHMS	CR	03	--	--	--	03	II	21CA1203
6	106	21CA2306	OPERATING SYSTEMS	CR	03	--	-	--	03	***	***
7	106	21CA2307	ANALYSIS AND DESIGN OF ALGORITHMS LAB	CR	-	-	02	--	01	***	***
8	106	21CA2308	OPERATING SYSTEMS LAB	CR	-	-	02	--	01	***	***
					<b>18</b>	<b>--</b>	<b>12</b>	<b>--</b>	<b>24</b>		
9	106	21AU0021	KANNADA KALI - II	AU	02	--	--	--	--	***	***
		21AU0025	KANNADA MANASU - II								

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

*ce s coril*

*Chittarajewar*

*WSP*

*Angs R. Chitra*

Department of Computer Applications  
Dayananda Sagar University  
Kannada Division  
Bangalore - 560075

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**DAYANANDA SAGAR UNIVERSITY**  
School of Engineering

**DEPARTMENT OF COMPUTER APPLICATIONS**

IV SEMESTER

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING						SE M	PREREQUISITE COURSE CODE					
					L	T	P	S / P	C								
1	106	21CA2401	OBJECT ORIENTED ANALYSIS AND DESIGN	CR	03	--	02	--	04	04	04	04	02	02	***	***	
2	106	21CA2402	WEB TECHNOLOGY	CR	03	--	--	--	03	03	03	03	03	03	03	***	21CA1104
3	106	21CA2403	DATABASE SYSTEMS	CR	03	--	--	--	03	03	03	03	03	03	03	***	***
4	106	21CA2404	SOFTWARE TESTING	CR	03	--	--	--	04	04	04	04	04	04	04	***	***
5	106	21CA24XX	PROFESSIONAL ELECTIVE - I	CR	02	01	02	--	04	04	04	04	04	04	04	***	***
6	106	21CA2405	WEB TECHNOLOGY LAB	CR	-	-	02	--	01	01	01	01	01	01	01	***	***
7	106	21CA2406	DATABASE SYSTEMS LAB	CR	-	-	02	--	01	01	01	01	01	01	01	***	***
8	106	21CA2407	MINOR PROJECT	CR	-	-	--	04	04	04	04	04	04	04	04	***	***
					14	01	10	04	04	22							

SL	COURSE CODE	COURSE TITLE
1	21CA2408	SYSTEM ADMINISTRATION
2	21CA2409	IOT
3	21CA2410	UNIX INTERNALS
4	21CA2411	INTERNET & WEB ARCHITECTURE

PROFESSIONAL ELECTIVE - I

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

See 5 conll  
  
 Chairperson  
 Department of Computer Applications  
 Dayananda Sagar University  
 Bengaluru  
 Date: \_\_\_\_\_



**DAYANANDA SAGAR UNIVERSITY**  
School of Engineering  
**DEPARTMENT OF COMPUTER APPLICATIONS**

V SEMESTER

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING							SEM	PREREQUISITE COURSE CODE
					L	T	P	S / P	C				
1	106	21CA3501	INFORMATION AND NETWORK SECURITY	CR	02	01	--	--	03	***	***		
2	106	21CA35XX	PROFESSIONAL ELECTIVE -II	CR	02	01	02	--	04	***	***		
3	106	21CA35XX	PROFESSIONAL ELECTIVE - III	CR	02	01	02	--	04	***	***		
4	106	21CA3502	INFORMATION AND NETWORK SECURITY LAB	CR	-	-	02	--	01	***	***		
5	106	21CA3581	PROJECT STAGE I	CR	-	-	--	08	04	***	***		
6	106	21CA2504	LIBERAL STUDIES 5	CR	01				01				

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits  
**PROFESSIONAL ELECTIVE - II & III**

SL	COURSE CODE	COURSE TITLE
1	21CA3505	BIG DATA ANALYTICS USING HADOOP
2	21CA3506	DATABASE ADMINISTRATION
3	21CA3507	MOBILE PROGRAMMING

See 5 con 14

*Dr. R. G. G.*

*[Signature]*

Chairperson  
Department of Computer Applications

Dr. R. G. G.  
Head, Department of Computer Applications  
Dayananda Sagar University  
Bangalore - 560075

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DAYANANDA SAGAR UNIVERSITY  
School of Engineering

DEPARTMENT OF COMPUTER APPLICATIONS

4	21CA3508	MOBILE SECURITY
5	21CA3509	LINUX OPEN SOURCE SYSTEM
7	21CA3510	CLIENT / SERVER SIDE SCRIPTING
8	21CA3511	BLOCKCHAIN TECHNOLOGIES
9	21CA3512	COMPUTER GRAPHICS AND MULTIMEDIA

*Mr. P. P.*

*Dr. M. K. B.*

**Chairperson**  
Department of Computer Applications  
School of Engineering,  
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Kudlu Gate, 100 Feet Main Road,  
Bangalore - 560014

*ce & ce/12*

*Dr. R. C.*



**DAYANANDA SAGAR UNIVERSITY**  
 School of Engineering  
**DEPARTMENT OF COMPUTER APPLICATIONS**

VI SEMESTER

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PREREQUISITE SEM	COURSE CODE
					L	T	P	S/P	C		
1	106	21CA36XX	PROFESSIONAL ELECTIVE -IV	CR	02	01	02	--	04	***	***
2	106	21CA36XX	PROFESSIONAL ELECTIVE -V	CR	02	01	02	--	04	***	***
3	106	21CA3682	PROJECT STAGE II	CR	-	-	12	--	06	***	***
					<b>04</b>	<b>02</b>	<b>14</b>	<b>--</b>	<b>14</b>		

**TOTAL CREDITS:123**

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits, CIA - Continuous Internal Assessment

**PROFESSIONAL ELECTIVE - IV & V**

SL	COURSE CODE	COURSE TITLE
1	21CA3601	ADVANCE DATABASE (NOSQL)
2	21CA3602	WEB ADMINISTRATION
3	21CA3603	GAME PROGRAMMING

*Amrita R. Gupta*

*[Signature]*

**Chairperson**  
 Department of Computer Applications  
 School of Engineering  
 Dayananda Sagar University  
 Bangalore - 560075

*[Signature]*  
*Dr. H. B. Gowd*

See 5 con/11



**DAYANANDA SAGAR UNIVERSITY**  
School of Engineering

**DEPARTMENT OF COMPUTER APPLICATIONS**

4	21CA3604	NETWORK ADMINISTRATION
5	21CA3605	ETHICAL HACKING
6	21CA3606	WEB SECURITY
7	21CA3607	DATA SCIENCE
8	21CA3608	CLOUD COMPUTING
9	21CA3609	ANIMATIONS

**Chairperson**  
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Arifa R. Arifa

Department of Computer Applications

BCA

Programme Structure for 2021 Scheme

Dayananda Sagar  
University Bangalore



Course code	I Sem			II Sem			III Sem			IV Sem			V Sem			VI Sem			
	Course Name	Credits type	Course code	Course Name	Credits type	Course code	Course Name	Credits type	Course code	Course Name	Credits type	Course code	Course Name	Credits type	Course code	Course Name	Credits type	Course code	
2ICA101	MATHEMATICS - I	4 BSC	2ICA1201	MATHEMATICS - II	4 BSC	2ICA2301	COMPUTER NETWORKS	4 PCC	2ICA2401	OBJECT ORIENTED ANALYSIS AND DESIGN	4 PCC	2ICA3501	INFORMATION & NETWORK SECURITY	4 PCC	2ICA36XX	PROFESSIONAL ELECTIVE - IV	4 PEC		
2ICA102	FUNDAMENTALS OF PROGRAMMING	4 PCC	2ICA1202	OBJECT ORIENTED PROGRAMMING USING JAVA	4 PCC	2ICA2302	HUMAN COMPUTER INTERFACE	4 PCC	2ICA2402	WEB TECHNOLOGIES	4 PCC	2ICA35XX	PROFESSIONAL ELECTIVE - II	4 PEC	2ICA36XX	PROFESSIONAL ELECTIVE - V	4 PEC		
2ICA103	COMPUTER ORGANISATION - I	4 PCC	2ICA1203	DATA STRUCTURES	4 PCC	2ICA2303	SOFTWARE ENGINEERING USING AGILE APPROACH	4 PCC	2ICA2403	DATABASE SYSTEMS	4 PCC	2ICA35XX	PROFESSIONAL ELECTIVE - III	4 PEC	2ICA3682	PROJECT STAGE - II	6 P/I		
2ICA104	WEB PROGRAMMING	4 PCC	2ICA1204	ORGANISATION - II	4 PCC	2ICA2304	NUMERICAL METHODS	4 BSC	2ICA2404	SOFTWARE TESTING	4 PCC	2ICA3581	PROJECT STAGE - I	4 P/I					
2ICA105	FINANCIAL MANAGEMENT	4 BSC	2ICA1205	COMMUNICATIONS	3 BSC	2ICA2305	DESIGN OF ALGORITHMS	4 PCC	2ICA24XX	LIBERAL STUDIES	1 HSC								
2ICA106	ENGLISH IN PRACTICE	3 HSC	2ICA1209	SEMINAR	1 P/I	2ICA2306	OPERATING SYSTEMS	4 PCC	2ICA2407	MINOR PROJECT	2 P/I								
	TOTAL	23		TOTAL	20		TOTAL	24		TOTAL	22		TOTAL	17		TOTAL	14		

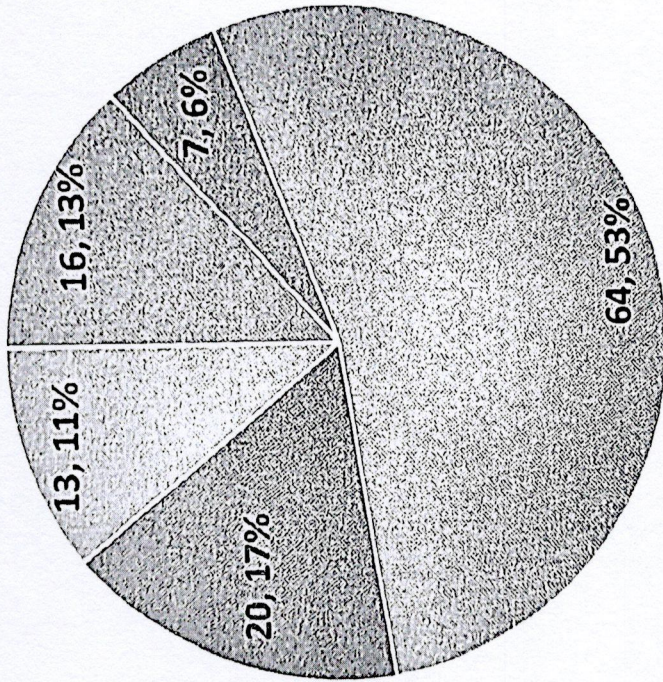
*(Signature)*  
Dr. M. K. Banga

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Wojanperson  
Department of Computer Applications  
School of Engineering  
Dayananda Sagar University  
Kudlu Gate, Hosur, Main Road  
Bangalore - 560114

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Anjo R. Castro

# Course type distribution



■ BSC ■ ESC ■ HSC ■ PCC ■ PEC ■ OEC ■ P/I

- Basic Sciences (Subjects such as Physics, Chemistry, Maths)
- Humanities Sciences
- Engineering Sciences Courses (subjects Such as, 1st year EC, EE, CPP, etc.,)
- Program Core Courses
- Program Elective Courses
- Open Elective Courses
- Major Project/Technical Seminar/Internship

BSC  
HSC  
ESC  
PCC  
PEC  
OEC  
P/I

*Anga R. Cutra*

**Chairperson**  
Department of Computer Applications  
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Dayanand Sagar University  
Kudlu G.ite, Hosur Main Road  
Bangalore - 560114

*Dr. H.K. B. B. B.*



DAYANANDA SAGAR UNIVERSITY  
SCHOOL OF ENGINEERING  
KUDLU GATE, BANGALORE- 560068

Department of Computer Application

BOS Meeting Held on 18-03-2021

Proceedings of the Meeting

Members Present :

i)	Dr. Manjunath M B	Member	CU S 0016
ii)	Dr. Ram Kumar P S	Member	
iii)	Dr. M K Banga	Member	
iv)	Dr. Sanjay Chitnis	Member	
v)	Dr. S Shyam Pandeya	Member	
vi)	Dr. G Babu Karthick	Member	
vii)	Dr. Vasanthi Kumari P	Chairman	

Points Discussed and Observations:

- i) Deliberated on the scheme of the Core courses of 2 year MCA Programme
  - a. The members were given the details of the draft syllabus of I and II semesters and bridge courses for the non-Computer Science graduates of the 2 year MCA Programme in the scheme. The members suggested changes in the draft scheme and syllabus.
  - b. Members felt that the challenge of the MCA course and the syllabus must be designed for the current technology which will go along with the placement of students. They also suggested the core and elective areas for placements such as Software testing, Big Data and Data Science, Full Stack development, Computational intelligence and cloud computing.
  - c. The department electives-I were discussed and finalized.
  - d. The I semester of MCA will have the compulsory core courses.
  - e. The II semester of MCA will have one departmental elective and III semester of MCA will have two departmental electives where the students can select the electives out of options given.
  - f. The IV semester of MCA will have three electives out of which one will be Departmental elective, the next one will be a MOOC and the third one will be an open elective where the students can select the electives out of options given.
  - g. The syllabi of all the core courses and the Labs were presented one after another.



**DAYANANDA SAGAR UNIVERSITY**  
**SCHOOL OF ENGINEERING**  
**KUDLU GATE, BANGALORE- 560068**

- i. Members proposed that the I Semester Core course "Advanced Software Engineering" must include software testing and tools.
  - j. Members proposed that the I Semester Core course "Probability and Statistics" must include Statistical Modelling.
  - k. Members proposed that the I Semester Lab course "Advanced Operating System" must include programs on parallel programming.
  - l. Members proposed that the II Semester Core course "Java Programming" must include Advanced Frameworks.
  - m. Members proposed that the II Semester Lab course "Java Programming and Network" must include programs on Real time applications.
  - n. Members proposed three Departmental Elective I courses of II Semester which includes "Data Analytics & Visualization", "Virtualization & Cloud Computing" and "Full Stack Development".
- ii) Chairman and members suggested and recommended to encourage students with sound theoretical and practical background to take up projects in Industry.
  - iii) Program structure for all the semesters of MCA is discussed and approved by all the members of BoS.
  - iv) All lab courses will include mini projects.

**Decisions taken :**

- i) The intake for MCA will be BCA/B. Sc.(CS/IT) or B.Sc./B.Com/BA from a recognized University with Mathematics at 10+2 level of Graduation Level(**with additional Bridge Courses as per the norms of the University**). Obtained atleast 50% marks in the Qualifying Examination.
- ii) The modified scheme and syllabi of the courses in I and II semesters and the syllabus of the bridge courses of MCA were approved. This will be circulated among the members for their concurrence. Details are in Annexure - I.

( Dr. Vasanthi Kumari P )  
Chairman,  
BoS in Computer Applications

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Dr. R. Chitra

**Chairperson**  
Department of Computer Applications  
School of Engineering  
Dayanand Sagar University  
Kudlu Gate, Hosur Main Road  
Bangalore - 560114

SCHEME - MCA - 2021 - 22 ONWARDS

I Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING						PRE-REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE	
1	224	21MCA4101	DATA STRUCTURES	CR	3	-	-	-	-	3	*	***
2	224	21MCA4102	COMPUTER ARCHITECTURE AND MICROCONTROLLER	CR	3	-	2	-	-	4	*	***
3	224	21MCA4103	ADVANCED OPERATING SYSTEMS	CR	3	-	-	-	-	3	*	***
4	224	21MCA4104	ADVANCED SOFTWARE ENGINEERING AND TESTING	CR	3	-	2	-	-	4	*	***
5	224	21MCA4105	PROBABILITY & STATISTICS	CR	3	-	2	-	-	4	*	***
6	224	21MCA4106	DATA STRUCTURES LAB	CR	-	-	4	-	-	2	*	***
7	224	21MCA4107	ADVANCED OPERATING SYSTEM LAB	CR	-	-	4	-	-	2	*	***
					15	-	14	-	-	22		

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

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*Sanj R. Ojha*

**Chairperson**  
Department of Computer Applications  
School of Engineering  
Dayanand Sagar University  
Kudlu Gate, Hoosur Main Road  
Bangalore - 560114

**SCHEME - MCA - 2021 - 22 ONWARDS**

**II Semester**

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	224	21MCA4201	ADVANCED ALGORITHMS	CR	3	-	-	-	3	*	****
2	224	21MCA4202	JAVA PROGRAMMING	CR	3	-	-	-	3	*	****
3	224	21MCA4203	COMPUTER COMMUNICATION AND NETWORKS	CR	3	-	-	-	3	*	****
4	224	21MCA4204	DATABASE MANAGEMENT SYSTEMS	CR	3	-	-	-	3	*	****
5	224	21MCA4205	ADVANCED ALGORITHMS LAB	CR	-	-	4	-	2	*	****
6	224	21MCA4206	JAVA PROGRAMMING AND NETWORKS LAB	CR	-	-	4	-	2	*	****
7	224	21MCA4207	DATABASE MANAGEMENT SYSTEMS LAB	CR	-	-	4	-	2	*	****
8	224	21MCA4208	SUMMER INTERNSHIPS	CR	-	-	4	-	2	*	****
9	224	21MCA42XX	DEPARTMENT ELECTIVE - I	CR	3	-	2	-	4	*	****
					15		18		24		

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

#	COURSE CODE	DEPARTMENT ELECTIVE - I
1	21MCA4209	DATA ANALYTICS & VISUALIZATION
2	21MCA4210	VIRTUALIZATION & CLOUD COMPUTING
3	21MCA4211	FULL STACK DEVELOPMENT

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*Dr. R. Chitra*

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**Chairperson**  
Department of Computer Applications  
School of Engineering  
Dyasaad Nagar University  
Kudla Gate, Heenar Main Road  
Bangalore - 560114

**III SEMESTER**

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING							PRE-REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE		
1	224	21MCA4301	AI AND MACHINE LEARNING	CR	03	-	-	-	-	03	*	***	
2	224	21MCA4302	EMBEDDED SYSTEMS AND INTERNET OF THINGS	CR	03	-	-	-	-	03	*	***	
3	224	21MCAXXXX	DEPARTMENT ELECTIVE -2	CR	03	-	02	-	-	04	*	***	
4	224	21MCAXXXX	DEPARTMENT ELECTIVE -3	CR	03	-	02	-	-	04	*	***	
5	224	21MCA4303	AI AND MACHINE LEARNING LAB USING PYTHON	CR	-	-	04	-	-	02	*	***	
6	224	21MCA4304	EMBEDDED AND INTERNET OF THINGS LABORATORY	CR	--	--	04	-	-	02	*	***	
7	224	21MCA4305	SOCIALLY RELEVANT PROJECT	CR	--	--	08	-	-	04	*	***	
					12	-	20	-	-	22			

COURSE CODE	DEPARTMENT ELECTIVES II & III
21MCA4306	DISTRIBUTED COMPUTING (HADOOP AND SCALA)
21MCA4307	DATA MINING
21MCA4308	BUSINESS INTELLIGENCE TECHNOLOGY
21MCA4309	BIG DATA WITH R
21MCA4310	DATA SCIENCE
21MCA4311	CLOUD NETWORKING & SECURITY
21MCA4312	CLOUD STORAGE
21MCA4313	MOBILE APPLICATION DEVELOPMENT TECHNIQUES

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*Arjita R Chatterjee*

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**Chairperson**  
Department of Computer Applications  
School of Engineering  
Dayanand Sagar University  
Kudlu Gate, Hosur Main Road  
Bangalore - 560112

IV SEMESTER

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	224	21MCAXXXX	DEPARTMENT ELECTIVE -4	CR	03	-	02	-	04	*	***
2	224	21MCAXXXX	OPEN ELECTIVE -(MOOC)	CR	03	-	02	-	04	*	***
3	224	21MCAXXXX	OPEN ELECTIVE(MOOC)	CR	03	-	02	-	04	*	***
4	224	21MCA4404	DISSERTATION	CR	-	-	10	-	05	*	***
					09	-	16	-	17		

COURSE CODE	DEPARTMENT ELECTIVES IV
21MCA4401	INFORMATION SECURITY
21MCA4402	INTRODUCTION TO SOCIAL NETWORK ANALYSIS
21MCA4403	DEEP LEARNING
21MCA4405	BLOCK CHAIN TECHNOLOGY


COURSE CODE	LIST OF OPEN ELECTIVES
21MCA4406	BUSINESS DATA ANALYTICS
21MCA4407	INDUSTRIAL SAFETY
21MCA4408	OPERATIONS RESEARCH
21MCA4409	COST MANAGEMENT OF ENGINEERING PROJECTS
21MCA4410	COMPOSITE MATERIALS
21MCA4411	WASTE TO ENERGY

See 5 cell 12

Dr. R. Chitra



**Chairperson**  
 Department of Computer Applications  
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Dr. R. Chitra



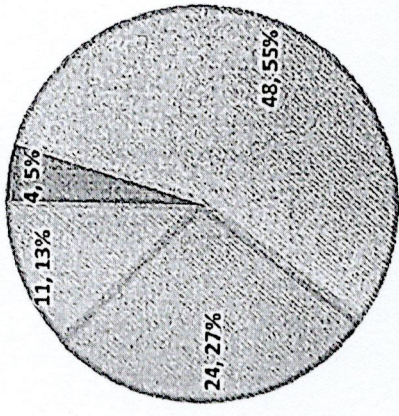
Dayananda Sagar  
University Bangalore

Department of Computer Applications  
MCA  
Programme Structure for 2021 Scheme

I Sem			II Sem			III Sem			IV Sem		
Course code	Course Name	Credit type	Course code	Course Name	Credit type	Course code	Course Name	Credit type	Course code	Course Name	Credit type
21MCA4101	DATA STRUCTURES AND COMPUTER ARCHITECTURE	5 PCC	21MCA4201	ADVANCED ALGORITHMS	5 PCC	21MCA4301	MACHINE LEARNING	5 PCC	21MCA4401	DEPARTMENT ELECTIVE-IV	4 PEC
21MCA4102	MICROCONTROLLER	4 PCC	21MCA4202	JAVA PROGRAMMING	5 PCC	21MCA4302	EMBEDDED SYSTEMS AND IOT	5 PCC	21MCA4402	MOOC-I	4 PEC
21MCA4103	OPERATING SYSTEMS	5 PCC	21MCA4203	COMMUNICATIONS AND NETWORKS	5 PCC	21MCA4303	DEPARTMENT ELECTIVE-II	4 PEC	21MCA4403	MOOC-II	4 PEC
21MCA4104	SOFTWARE ENGINEERING AND PROBABILITY AND STATISTICS	4 PCC	21MCA4204	MANAGEMENT SYSTEMS	5 PCC	21MCA4304	DEPARTMENT ELECTIVE-III	4 PEC	21MCA4404	DISSERTATION	5 P/I
21MCA4105	STATISTICS	4 BSC	21MCA4205	SUMMER INTERSHIPS DEPARTMENT ELECTIVE-I	2 P/I	21MCA4305	RELEVANT PROJECT	4 P/I			
			21MCA420X		4 PEC						
TOTAL		22	TOTAL		26	TOTAL		22	TOTAL		17

COURSE TYPE DISTRIBUTION

■ BSC ■ ESC ■ HSC ■ PCC ■ PEC ■ OEC ■ P/I



BSC Basic Sciences (Subjects such as Physics, Chemistry, Maths)  
 HSC Humanities Sciences  
 ESC Engineering Sciences Courses (subjects such as, 1st year EC, EE, CPP, etc.)  
 PCC Program Core Courses  
 PEC Program Elective Courses  
 OEC Open Elective Courses  
 P/I Major Project/Technical Seminar/Internship

*Handwritten signatures and notes:*  
 Cee S ceerik  
 Anja R. Castro  
 Chairperson  
 Department of Computer Applications  
 School of Engineering  
 Dayananda Sagar University  
 Kudlu Gate, Hosur, Main Road  
 Bangalore - 560114

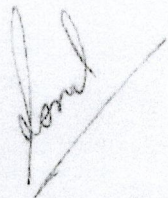
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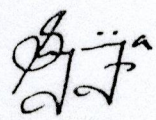
## Board of Studies: Minutes of Meeting

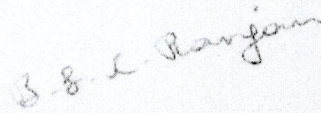
*Board of Studies Members: Prof. Amaresh Chakrabarti, Prof. Pramod Khadilkar, Ms. Suganya A. Prof. Dinesh Kulkarni, Prof. BSC Ranjan, Prof. Sonal Keshwani*

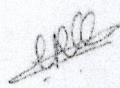
### Meeting Points

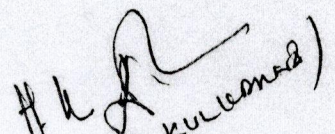
1. What are the USPs of DSU School of Design?
2. Projects should be contiguous.
3. A project on entrepreneurship needs to be introduced in which students learn business model development.
4. Courses on Society and Human Behavior that includes consumer behavior should be included.
5. Trend Analysis and Forecasting can be a part of Product Planning and Strategy.
6. Topics on Material Selection should be included in Material Exploration courses.
7. How many courses are included in each of the following baskets: Aesthetics, technical function, sustainability function, Integration courses? Check which basket has lesser number of courses as compared to the other baskets. There must be a balance of courses among these baskets.
8. Another set of course basket could be: Mindset, Skill based course, Integration courses. Check which basket has lesser number of courses as compared to the other baskets. There must be a balance of courses among these baskets.
9. Projects should be tuned so that they cover only those aspects that have been taught in the theory until then.
10. A mini project in the 1 Semester that allows students to design without any prior knowledge of design process.
11. Reshuffling of courses can be considered.
12. Topics on the analysis of needs of all the stakeholders can be introduced.
13. Credit distribution in the semesters 7 and 8 should be revised so that the number of hours are increased while keeping the same credits.



  
(Suganya Arun)



  
(Pramod Khadilkar)

  
(Dinesh Kulkarni)



SCHEME – B.Des – Product Design – 2021-22 ONWARDS

I Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	125	21BD1101	INTRODUCTION TO DESIGN	CR	2	-	2	-	3	*	***
2	125	21BD1102	BASICS OF CAD AND 3D PRINTING	CR	1	1	2	-	3	*	***
3	125	21BD1103	NEED ANALYSIS METHODS	CR	2	-	2	-	3	*	***
4	125	21BD1104	FUNDAMENTALS OF PROGRAMMING	CR	2	1	4	-	5	*	***
5	125	21BD1105	MATHEMATICS FOR DESIGN-I	CR	2	-	2	-	3	*	***
6	125	21BD1106	PHYSICS FOR DESIGN	CR	2	-	2	-	3	*	***
7	125	21BD1107	DESIGN SKETCHING KANNADA	CR	2	-	4	-	4	*	***
8	125	21BD1108	CONSTITUTION OF INDIA AND ETHICS	CR	1	-	-	-	1	*	***
9	125	21AU0004		AU	1	-	-	-	-	*	***
					15	2	18	0	25		

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

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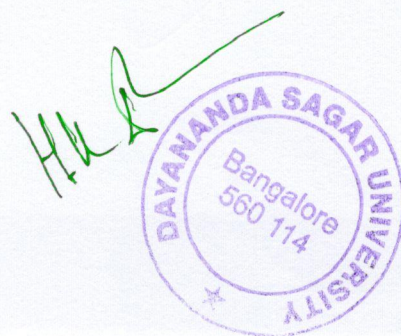


SCHEME - B.Des - Product Design - 2021-22 ONWARDS

II Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE		
					L	T	P	S/P	C	SEM	COURSE CODE	
1	125	21BD1201	COGNITION IN DESIGN	CR	2	-	0	-	-	2	*	***
2	125	21BD1202	ENGINEERING GRAPHICS	CR	1	-	4	-	-	3	*	***
3	125	21BD1203	MINI PROJECT-I - PRODUCT DESIGN (PD)	CR	1	-	4	-	-	3	*	***
4	125	21BD1204	MINI PROJECT-I - USER EXPERIENCE DESIGN (UXD)	CR	1	-	4	-	-	3	*	***
5	125	21BD1205	MATHEMATICS FOR DESIGN-II	CR	2	1	0	-	-	3	*	***
6	125	21BD1206	CHEMISTRY FOR DESIGN	CR	2	-	2	-	-	3	*	***
7	125	21BD1207	ELEMENTS OF MECHANICAL ENGINEERING	CR	2	1	2	-	-	4	*	***
8	125	21BD1208	ENVIRONMENTAL SCIENCES	CR	2	-	-	-	-	2	*	***
					13	2	2	16	0	23		

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SCHEME - B.Des - Product Design - 2021-22 ONWARDS

III Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S / P	C	SEM	COURSE CODE
1	125	21BD2301	COMPUTER AIDED DESIGN	CR	3	-	2	-	4	*	***
2	125	21BD2302	FOUNDATIONS 2D	CR	3	-	2	-	4	*	***
3	125	21BD2303	ERGONOMICS-I	CR	2	-	2	-	3	*	***
4	125	21BD2304	PHOTOGRAPHY AND VIDEOGRAPHY	CR	2	-	4	-	4	*	***
5	125	21BD2305	DESIGN STUDIO-I - MINI PROJECT-II	CR	1	-	6	-	4	*	***
6	125	21BD2306	TECHNICAL COMMUNICATION	CR	2	-	-	-	2	*	***
					13	-	16	-	21		

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

*H.K.R.*



SCHEME - B.Des - Product Design - 2021-22 ONWARDS

IV Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S / P	C	SEM	COURSE CODE
1	125	21BD2401	DESIGN SKETCHING-II	CR	3	-	2	-	4	*	***
2	125	21BD2402	MATERIAL EXPLORATION-I	CR	3	-	-	-	3	*	***
3	125	21BD2403	FOUNDATIONS 3D	CR	3	-	2	-	4	*	***
4	125	21BD2404	ERGONOMICS-II	CR	2	-	2	2	4	*	***
5	125	21BD2405	IDEATION METHODS IN DESIGN	CR	3	-	2	-	4	*	***
6	125	21BD2406	DESIGN STUDIO-II - MINI-PROJECT-III	CR	2	-	4	-	4	*	***
					16	-	12	2	23		

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SCHEME - B.Des - Product Design - 2021-22 ONWARDS

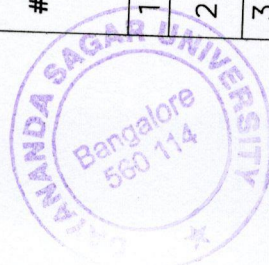
V Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S	C	SEM	COURSE CODE
1	125	21BP3501	MATERIAL EXPLORATIONS-II	CR	3	-	-	2	4	*	***
2	125	21BP3502	DESIGN STUDIO-III	CR	2	-	4	-	4	*	***
3	125	21BP3503	PRODUCT PLANNING AND STRATEGY BUILDING	CR	2	-	2	2	4	*	***
4	125	21BD35XX	PROFESSIONAL ELECTIVE-I	CR	2	-	2	-	3	*	***
5	125	21BD35XX	PROFESSIONAL ELECTIVE-II	CR	2	-	2	-	3	*	***
6	125	21BD35XX	PROFESSIONAL ELECTIVE-III	CR	2	-	2	-	3	*	***
					13	-	12	4	21		

SCHEME - B.Des - Product Design - 2021-22 ONWARDS

VI Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S	C	SEM	COURSE CODE
1	125	21BP3601	INTRODUCTION TO DESIGN RESEARCH	CR	2	-	2	2	4	*	***
2	125	21BP3602	MINI PROJECT-V - DESIGN FOR SUSTAINABILITY	CR	2	-	2	2	4	*	***
3	125	21OEXXX	OPEN ELECTIVE-I	CR	3	-	-	-	3	*	***
4	125	21OEXXX	OPEN ELECTIVE-II	CR	3	-	-	-	3	*	***
5	125	21BD36XX	PROFESSIONAL ELECTIVE-IV	CR	3	-	2	-	4	*	***
6	125	214BD36XX	PROFESSIONAL ELECTIVE-V	CR	3	-	2	-	4	*	***
					16	-	8	4	22		



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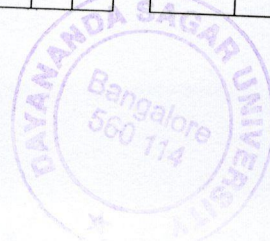
S.No.	COURSE CODE	PROFESSIONAL ELECTIVE – I
1	21BD3501	DESIGN SEMIOTICS AND SEMANTICS
2	21BD3511	DESIGN OF SMART SYSTEMS
3	21BD3512	VEHICLE STYLING
4	21BD3513	MOTION GRAPHICS

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE–II
1	21BD3514	DESIGN MANAGEMENT
2	21BD3506	PACKAGING AND BRANDING

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE–III
1	21BD3515	INTERIOR DESIGN
2	21BD3516	DESIGN SIMULATION AND ANALYSIS
3	21BD3517	NEW PRODUCT DEVELOPMENT

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE–IV
1	21BD3606	AR AND VR TECHNOLOGIES IN DESIGN
2	21BD3607	TECHNICALLY COMPLEX PRODUCTS

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE–V
1	21BD3608	PRODUCT LIFE CYCLE AND MANAGEMENT
2	21BD3609	AI APPLICATIONS IN DESIGN
3	21BD3610	DESIGN FOR ASSEMBLY AND DISASSEMBLY
4	21BD3611	ADVANCED SCULPTING



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SCHEME - B.Des - Product Design - 2021-22 ONWARDS

VII Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S / P	C	SEM	COURSE CODE
1	125	21BD4701	MAJOR PROJECT STAGE-I	CR	-	-	18	-	9	*	***
2	125	21BD4702	INTERNSHIP	CR	-	-	4	2	3	*	***
3	125	21BD4703	SOCIAL DESIGN	CR	2	-	-	-	2	*	***
4	125	21BD4704	DESIGNING FOR HUMAN BEHAVIOR	CR	2	-	-	-	2	*	***
5	125	21BD4705	DESIGN AND ENTERPRENEURSHIP	CR	2	-	-	-	2	*	***
					6	-	22	2	18		

SCHEME - B.Des - Product Design - 2021-22 ONWARDS

VIII Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S / P	C	SEM	COURSE CODE
1	125	21BD4801	MAJOR PROJECT STAGE-II	CR	-	-	24	-	12	*	***
					-	-	24	-	12		



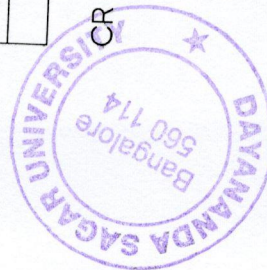
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SCHEME - B.Des - User Experience Design - 2021-22 ONWARDS

I Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	126	21BD1101	INTRODUCTION TO DESIGN	CR	2	-	2	-	3	*	***
2	126	21BD1102	BASICS OF CAD AND 3D PRINTING	CR	1	1	2	-	3	*	***
3	126	21BD1103	NEED ANALYSIS METHODS	CR	2	-	2	-	3	*	***
4	126	21BD1104	FUNDAMENTALS OF PROGRAMMING	CR	2	1	4	-	5	*	***
5	126	21BD1105	MATHEMATICS FOR DESIGN-I	CR	2	-	2	-	3	*	***
6	126	21BD1106	PHYSICS FOR DESIGN	CR	2	-	2	-	3	*	***
7	126	21BD1107	DESIGN SKETCHING	CR	2	-	4	-	4	*	***
8	126	21BD1108	KANNADA	CR	1	-	-	-	1	*	***
9	126	21AU0004	CONSTITUTION OF INDIA AND ETHICS	AU	1	-	-	-	-	*	***
					15	2	18	0	25		

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SCHEME – B.Des – User Experience Design – 2021-22 ONWARDS

II Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	126	21BD1201	COGNITION IN DESIGN	CR	2	-	0	-	2	*	***
2	126	21BD1202	ENGINEERING GRAPHICS	CR	1	-	4	-	3	*	***
3	126	21BD1203	MINI PROJECT-I – PRODUCT DESIGN (PD)	CR	1	-	4	-	3	*	***
4	126	21BD1204	MINI PROJECT-I – USER EXPERIENCE DESIGN (UXD)	CR	1	-	4	-	3	*	***
5	126	21BD1205	MATHEMATICS FOR DESIGN-II	CR	2	1	0	-	3	*	***
6	126	21BD1206	CHEMISTRY FOR DESIGN	CR	2	-	2	-	3	*	***
7	126	21BD1207	ELEMENTS OF MECHANICAL ENGINEERING	CR	2	1	2	-	4	*	***
8	126	21BD1208	ENVIRONMENTAL SCIENCES	CR	2	-	-	-	2	*	***
					13	2	16	0	23		

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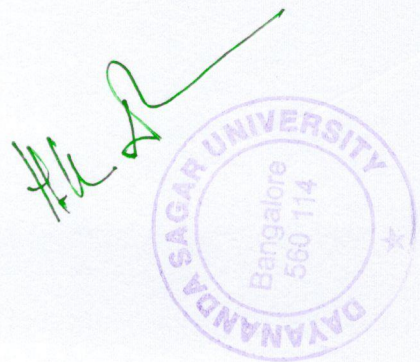


SCHEME - B.Des - User Experience Design - 2021-22 ONWARDS

III Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING				PRE-REQUISITE		
					L	T	P	S / P	SEM	COURSE CODE	
1	126	21BD2301	COMPUTER AIDED DESIGN	CR	3	-	2	-	4	*	***
2	126	21BD2302	FOUNDATIONS 2D	CR	3	-	2	-	4	*	***
3	126	21BD2303	ERGONOMICS-I	CR	2	-	2	-	3	*	***
4	126	21BD2304	PHOTOGRAPHY AND VIDEOGRAPHY	CR	2	-	4	-	4	*	***
5	126	21BD2305	DESIGN STUDIO-I - MINI PROJECT-II	CR	1	-	6	-	4	*	***
6	126	21BD2306	TECHNICAL COMMUNICATION	CR	2	-	-	-	2	*	***
					13	-	16	-	21		

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits

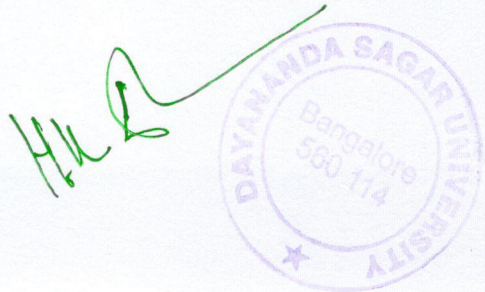


SCHEME – B.Des – User Experience Design – 2021-22 ONWARDS

IV Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING						PRE-REQUISITE	
					L	T	P	S	C	SEM	COURSE CODE	
1	126	21BD2401	DESIGN SKETCHING-II	CR	3	-	2	-	4	*	***	
2	126	21BD2402	MATERIAL EXPLORATION-I	CR	3	-	-	-	3	*	***	
3	126	21BD2403	FOUNDATIONS 3D	CR	3	-	2	-	4	*	***	
4	126	21BD2404	ERGONOMICS-II	CR	2	-	2	2	4	*	***	
5	126	21BD2405	IDEATION METHODS IN DESIGN	CR	3	-	2	-	4	*	***	
6	126	21BD2406	DESIGN STUDIO-II – MINI-PROJECT-III	CR	2	-	4	-	4	*	***	
					16	-	12	2	23			

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SCHEME – B.Des – User Experience Design – 2021-22 ONWARDS

V Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S	C	SEM	COURSE CODE
1	126	21BU3501	INTRODUCTION TO HCI	CR	2	-	2	2	4	*	***
2	126	21BU3502	GRAPHIC DESIGN	CR	2	-	4	-	4	*	***
3	126	21BU3503	INFORMATION FLOW, WIREFRAME AND NAVIGATION	CR	2	-	2	2	4	*	***
4	126	21BD35XX	PROFESSIONAL ELECTIVE-I	CR	2	-	2	-	3	*	***
5	126	21BD35XX	PROFESSIONAL ELECTIVE-II	CR	2	-	2	-	3	*	***
6	126	21BD35XX	PROFESSIONAL ELECTIVE-III	CR	2	-	2	-	3	*	***
					12	-	14	4	21		

SCHEME – B.Des – User Experience Design – 2021-22 ONWARDS

VI Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					PRE-REQUISITE	
					L	T	P	S	C	SEM	COURSE CODE
1	126	21BU3601	UX APPROACHES IN AGILE ENVIRONMENT	CR	2	-	2	2	4	*	***
2	126	21BU3602	USABILITY-MINI-PROJECT-IV	CR	2	-	2	2	4	*	***
3	126	21OEXXXX	OPEN ELECTIVE-I	CR	3	-	-	-	3	*	***
4	126	21OEXXXX	OPEN ELECTIVE-II	CR	3	-	-	-	3	*	***
5	126	21BD36XX	PROFESSIONAL ELECTIVE-IV	CR	3	-	2	-	4	*	***
6	126	21BD36XX	PROFESSIONAL ELECTIVE-V	CR	3	-	2	-	4	*	***
					16	-	8	4	22		

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits



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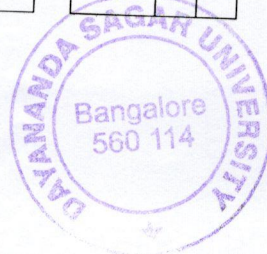
S.No.	COURSE CODE	PROFESSIONAL ELECTIVE – I
1	21BD3501	DESIGN SEMIOTICS AND SEMANTICS
2	21BD3502	ANIMATION DESIGN
3	21BD3503	USER RESEARCH AND APPLICATIONS
4	21BD3504	INTERACTION DESIGN

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE-II
1	21BD3505	UX FOR SMART SYSTEMS
2	21BD3506	PACKAGING AND BRANDING
3	21BD3507	TYPOGRAPHY

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE-III
1	21BD3508	UX AND DIGITALIZATION
2	21BD3509	TECHNOLOGY IN EXPERIENCE DESIGN
3	21BD3510	VISUAL DESIGN

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE-IV
1	21BD3601	EMERGING PATTERNS IN INTERFACE DESIGN
2	21BD3602	GAMIFICATION AND UX

S.No.	COURSE CODE	PROFESSIONAL ELECTIVE-V
1	21BD3603	RESEARCH METHODOLOGIES FOR UX
2	21BD3604	AR AND VR TECHNOLOGIES IN DESIGN
3	21BD3605	UX DESIGN ADVANCES



SCHEME - B.Des - User Experience Design - 2021-22 ONWARDS

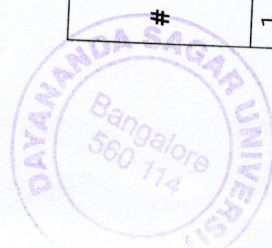
VII Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING						PRE-REQUISITE	
					L	T	P	S	C	SEM	COURSE CODE	
1	126	21BD4701	MAJOR PROJECT STAGE-I	CR	-	-	18	-	9	*	***	
2	126	21BD4702	INTERNSHIP	CR	-	-	4	2	3	*	***	
3	126	21BD4703	SOCIAL DESIGN	CR	2	-	-	-	2	*	***	
4	126	21BD4704	DESIGNING FOR HUMAN BEHAVIOR	CR	2	-	-	-	2	*	***	
5	126	21BD4705	DESIGN AND ENTERPRENEURSHIP	CR	2	-	-	-	2	*	***	
					6	-	22	2	18			

SCHEME - B.Des - User Experience Design - 2021-22 ONWARDS

VIII Semester

#	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING						PRE-REQUISITE	
					L	T	P	S	C	SEM	COURSE CODE	
1	126	21BD4801	MAJOR PROJECT STAGE-II	CR	-	-	24	-	12	*	***	
					-	-	24	-	12			



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# DAYANANDA SAGAR UNIVERSITY

## PROCEEDINGS OF BOS MEETING

- School :Arts and Humanities
- College :Journalism and Mass Communication
- Program/Department :BA Journalism and Mass Communication
- Mode of BOS Held :Hybrid
- Date :13.09.2021
- Venue : VII Floor, Building No.13, New Business Block, Kumaraswamy Layout, Bangalore
- Time :2 PM

### • Members Present :

SL.N o	Name	Designation & Affiliation	Signature
1	Rakesh S. Katarey	Professor, CJMC	
2	Dr. Leela Rao	Senior Professor, Editorial Consultant of National and International Journals	
3	Dr. Syed Amjed Ahmed	UGC Professor Emeritus, Bangalore	 13/09/2021
4	Dr. S. Balasubramanya	ICSSR Research Fellow and Former Chairman, JMC, Karnatak University	
5	Ms.H S Vaishnavi	Former Chief, Zee Kannada, Radio City and former Programming Head, Colors channel	
6	Prof. Krishna V	Dean IC, SoAH and Principal, CJMC	

### • Invitees Present :

SL.No	Name	Designation & Affiliation	Signature
1	Mr. Giri Kurichiyath	Asst Prof, CJMC	
2	Ms. Renuka Phadnis	Asst Prof, CJMC	
3	Dr. Meghana H R	Asst Prof, CJMC	
4	Ms. Ms. Abhilasha R	Asst Prof, CJMC	

• Members Absent :

SL.No	Name	Designation & Affiliation
1.	Prof. R Janardhan,	Pro Vice Chancellor, DSU
2.	Ms. Annisa Joseph	Senior Television Producer, Fremantle Media
3.	Ms. Parul Agarwal	former Chief of Bureau, <i>The Quint</i> , CNBC

• Agenda

SL.No	Particulars
1.	Syllabus for Year III of the BA (Honours) Journalism 2019 Batch.
2.	Syllabus for Year III of the BA (Journalism and Mass Communication) with Honours Option for the 2020 Batch.
3.	Discussion and finalizing the Program structure - Scheme (Course Matrix) for Year I (Sem I & II), Year II (Sem III & IV) and Year III (Sem V & VI) in CBCS model and respective syllabus for BA (Journalism and Mass Communication) 2021 Batch.
4.	Discussion and finalizing electives for 2021 BA Batch (specified in the Program structure)
5.	Continuation of the Scheme of Evaluation for Year I of the BA (Journalism and Mass Communication) with Honours Option for 2021 Batch. The Scheme of Evaluation is currently in force for the 2020 batch. That is, <ol style="list-style-type: none"> <li>60:40 weightage for CIE and SEE respectively and a passing mark of 40% in aggregate.</li> <li>Basis of final assessment of marks based only on continuous internal assessment in case of practical subjects.</li> </ol>
6.	Placing of Action Taken Report (ATR) of Structured feedback from the stakeholders for the academic year 2020-2021 and discussing the ATR and plans to incorporate the suggestions.

Agenda	Discussions Brief
1.	Suggestion by Ms.Vaishnavi to consider teaching of short film production and single episodes of programs. It was based on the thought that students will be absorbed faster by the TV industry because they know that skill. Students should also be taught different forms of scripting and how to produce a complete short film, which also will give them an added advantage.
2.	It was suggested by Dr. Amjed that the syllabus for Research Methodology is a little extensive. Only basics should be taught as it is not possible to go in-depth. Referring to books by Indian authors was suggested
3.	It was suggested by Dr. Amjed that in Sociology books by Indian authors should be added to the current textbook as reference.
4.	Prof. Amjad said the focus in the first semester should be on introducing to journalism only. Reporting and editing should not be taught in the first semester, which had indeed been accommodated. The discussion centred around the revised curriculum and syllabus. Prof. Rakesh drew the attention of the members to the important provisions of NEP, including the multiple exit points for students and the need to divide the programme into majors and minors. Members agreed that there was a need to



	<p>revisit the NEP once there was greater clarity on its implementation by the various committees. Members also agreed that some of the features of proposed by NEP – particularly on need to integrate other disciplines had already been incorporated into the curriculum through general electives in addition to the DSEs. Members discussed the rearrangement of some subjects in the curriculum to ensure greater flow and phased learning between semesters. There was for instance, a semester's gap between Photography and Videography and Broadcast Journalism. Members addressed this anomaly and the gap was closed. Consequently, CIH was moved to the first semester while P&amp;V was placed in the second semester closer to Broadcast Journalism in the third.</p> <p><b>Incorporation of the guidelines of Karnataka's NEP into CJMC's syllabus.</b></p> <p>Soft skills and Life skills have been introduced in along with Health and Wellbeing. The last has been made an audit subject.</p>
4.	Action Taken Report (ATR) of Structured feedback from the stakeholders for the academic year 2020 - 2021 was discussed in detail and the ATR was appreciated by the BOS members.
5.	A presentation was made by Prof. Krishna with the updates in the syllabus in which 95 per cent of the syllabus is the same. The syllabus has followed the guidelines as defined by Karnataka government's New Education Policy.
6.	The board approved the introduction of new courses: Social Media Marketing (19JH3505), Development Communication(19JH3506), Workshop II (19JH3603), Project-Lab Journal/Bulletin (19JH3604), Project-Documentary/Production (19JH3605), Project-Ad Or Corporate Film/Newsletter (19JH3606), Project-Development Communication (19JH3607) and Audio and Video Editing Tools (21JH1205)
7.	<p>CJMC has incorporated the CBCS model for the three batches, i.e 2019,2020 and 2021.</p> <p>i. CJMC is offering 24 credits in V sem and 20 credits in VI sem (2019 batch).</p> <p>ii. 2020 batch has a total of 32 credits in III year.</p> <p>iii. 2021 batch has a total of 48 credits in I year, 46 in II year and 42 credits III year.</p>

• Final Decisions/Resolutions/Recommendations

Agenda	Decisions/Resolutions/Recommendations
1.	It was agreed by Prof.Katarey and Ms. Vaishnavi that that short, five-minute films or a specific scene of a sitcom should be taught to students. The formats were agreed upon. Students will be taught different forms of scripting and how to produce a complete short film.
2.	Dr. Amjed will send the book list for Research Methodology.
3.	CBCS model to be followed for the 2021 Batch BA program structure.
4.	Approval of program structure and electives of 2021 batch.
5.	<p>As per the suggestions from the structured feedback and ATR, the BOS members have agreed that</p> <p>i. Focus in the first semester is only on basic writing and reporting.</p> <p>ii. Reporting and editing are not taught at the same time.</p> <p>iii. More time to be allotted for practical work/student production to build student portfolio.</p>

*Phy.*

*V. Konde*

*ASV*

*Lhad*

*S. Balasubramanian*

- List of Enclosures based on the Decisions/Resolutions/Recommendations submitted:

Agenda	Following discussion, the Board declared the following proposals – along with their respective schemes - as enclosed - as appropriate and recommended them to the University's statutory boards for approval/ratification:
1	Syllabus for Year III of the BA (Honours) Journalism 2019 Batch.
2	Syllabus for Year III of the BA (Journalism and Mass Communication) with Honours Option for the 2020 Batch.
3.	Program structure - Scheme (Course Matrix) for Year I, Year II and Year III and Syllabus for Year I of the BA (Journalism and Mass Communication) for 2021 Batch.
4.	The Scheme of Evaluation for Year I of the BA (Journalism and Mass Communication) with Honours Option for 2021 Batch will continue to be 60:40 weightage for CIE and SEE respectively and a passing mark of 40% in aggregate. In case of practical subjects, the Board recommended, as previously approved, a complete shift away from end-semester exams to continuous internal assessment for award of marks.
5.	Action Taken Report (ATR) of Structured feedback from the stakeholders for the academic year 2020 - 2021 and sample feedback form.





Signature of Chairman of BOS with Date



**DAYANANDA SAGAR UNIVERSITY**  
SHAVIGE MALLESHWARA HILLS, KUMARASWAMY LAYOUT  
BENGALURU – 560 111, KARNATAKA.

**SCHOOL OF ARTS AND HUMANITIES**



**SCHEME & SYLLABUS**  
**FOR**  
**BACHELOR OF ARTS (BA)**

**IN**

**JOURNALISM AND MASS COMMUNICATION**

**(With effect from 2021 - 22)**

**DAYANANDA SAGAR UNIVERSITY**  
SHAVIGE MALLESHWARA HILLS, KUMARASWAMY LAYOUT  
BENGALURU – 560 111, KARNATAKA.

**SCHOOL OF ARTS AND HUMANITIES**



**PROGRAM STRUCTURE  
FOR  
BACHELOR OF ARTS (BA)**

**IN**

**JOURNALISM AND MASS COMMUNICATION**

**(With effect from 2021)**

**SCHEME - BA- JOURNALISM AND MASS COMMUNICATION - 2021-22 ONWARDS**

**I SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	21JH1101	JOURNALISM APPRECIATION	CR	5	1	-	-	6	*	***
2	119	21JH1102	COMMUNICATION THEORY	CR	5	1	-	-	6	*	***
3	119	21JH1103	CONTEMPORARY INDIAN HISTORY	CR	5	1	-	-	6	*	***
4	119	21JH1104	ENGLISH SKILLS	CR	3	1	-	-	4	*	***
5	119	21JH1105	COMPUTER TOOLS AND DESIGN SKILLS FOR JOURNALISTS	CR	-	1	2	-	2	*	***
					<b>18</b>	<b>05</b>	<b>02</b>	<b>-</b>	<b>24</b>		
6	119	21AU0020	KANNADA KALI - I	AU	2	-	-	-	-	-	-

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits,  
CIA - Continuous Internal Assessment

*[Handwritten signatures and initials]*

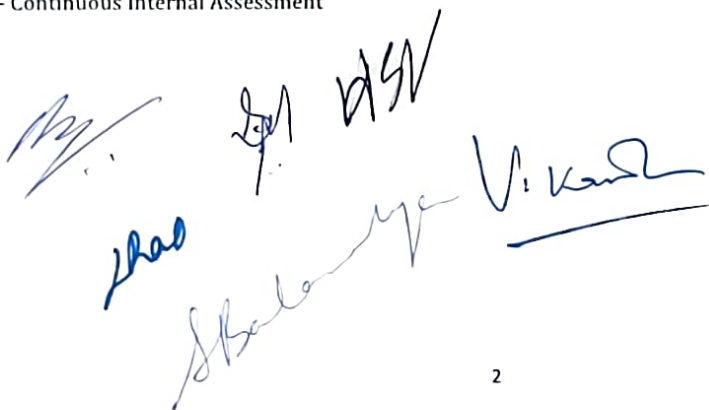
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**SCHEME – BA- JOURNALISM AND MASS COMMUNICATION – 2021-22 ONWARDS**

**II SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	21JH1201	NEWS WRITING AND REPORTING I	CR	4	-	4	-	6	*	***
2	119	21JH1202	PHOTOGRAPHY AND VIDEOGRAPHY	CR	4	-	4	-	6	*	***
3	119	21JH1203	POLITICAL PHILOSOPHY	CR	5	1	-	-	6	*	***
4	119	21JH1204	ENVIRONMENTAL STUDIES	CR	3	1	-	-	4	*	***
5	119	21JH1205	AUDIO AND VIDEO EDITING TOOLS	CR	-	2	-	-	2	*	***
					<b>16</b>	<b>04</b>	<b>08</b>	<b>-</b>	<b>24</b>		

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits, CIA – Continuous Internal Assessment

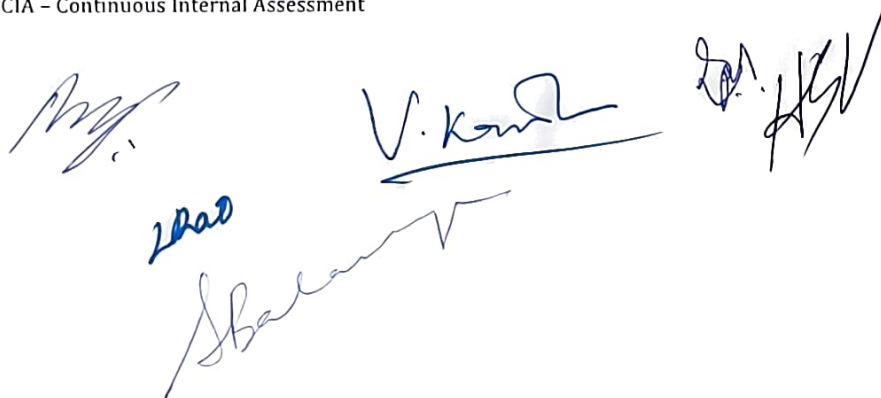

  
 The block contains several handwritten signatures in blue ink. One signature is clearly legible as 'Shoban'. Other signatures are more stylized and difficult to decipher, but appear to be 'V. Karan' and another name starting with 'S'.

**SCHEME - BA- JOURNALISM AND MASS COMMUNICATION - 2021-22 ONWARDS**

**III SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	21JH2301	BROADCAST MEDIA	CR	4	-	4	-	6	*	***
2	119	21JH2302	ADVERTISING AND PUBLIC RELATIONS	CR	4	-	4	-	6	*	***
3	119	21JH2303	ECONOMICS	CR	5	1	-	-	6	*	***
4	119	21JH2304	DIGITAL JOURNALISM AND SOCIAL MEDIA	CR	2	-	4	-	4	*	***
					<b>15</b>	<b>01</b>	<b>12</b>	<b>-</b>	<b>22</b>		
5	119	21AU0030	IPR	AU	2	-	-	-	-	-	-

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits,  
CIA – Continuous Internal Assessment


  
 The block contains several handwritten signatures in blue ink. One signature is clearly legible as 'V. K. K...' with a horizontal line underneath. Other signatures are more stylized and difficult to decipher.

**SCHEME - BA- JOURNALISM AND MASS COMMUNICATION - 2021-22 ONWARDS**

**IV SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	21JH2401	CONSTITUTION AND PUBLIC INSTITUTIONS	CR	5	1	-	-	6	*	***
2	119	21JH2402	DIGITAL MEDIA MARKETING	CR	5	1	-	-	6	*	***
3	119	21JH2403	SOCIOLOGY	CR	5	1	-	-	6	*	***
<b>ANY ONE OF THE FOLLOWING COURSES SHOULD BE OPTED</b>											
4	119	21JH2404	NEWS WRITING AND REPORTING II	CR	4	-	4	-	6	*	***
5	119	21JH2405	UNDERSTANDING MOVIES	CR	5	1	-	-	6	*	***
					-	-	-	-	24		

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits,  
CIA - Continuous Internal Assessment

*Prof. L. Rao*  
*V. K. Kulkarni*  
*S. Balakrishna*

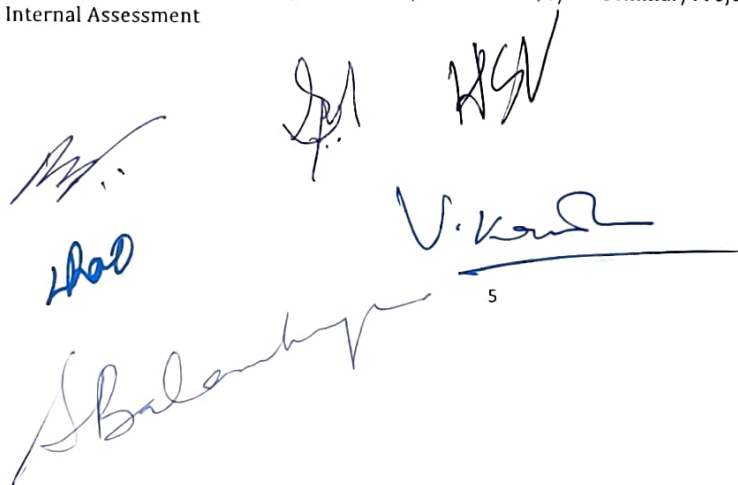
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**SCHEME - BA- JOURNALISM AND MASS COMMUNICATION - 2021-22 ONWARDS**

**V SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	21JH3501	EDITING AND PRODUCTION FOR PRINT AND ONLINE	CR	4	-	4	-	6	*	***
2	119	21JH3502	MEDIA LAWS AND ETHICS	CR	5	1	-	-	6	*	***
<b>ANY TWO OF THE FOLLOWING COURSES SHOULD BE OPTED</b>											
3	119	21JH3503	SHORT FILM PRODUCTION	CR	4	-	4	-	6	*	***
4	119	21JH3504	EXPLANATORY AND TECH WRITING	CR	4	-	4	-	6	*	***
5	119	21JH3505	CORPORATE COMMUNICATION	CR	5	1	-	-	6	*	***
6	119	21JH3506	DEVELOPMENT COMMUNICATION	CR	5	1	-	-	6	*	***
					-	-	-	-	24		

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits, CIA - Continuous Internal Assessment

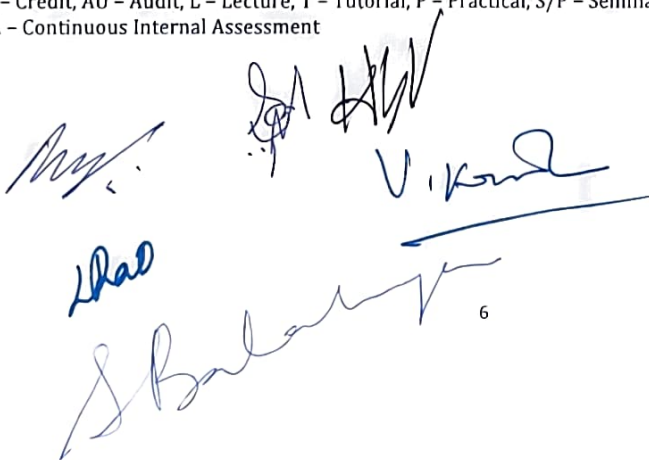

  
 M. S. ...  
 J. ...  
 HGN  
 V. K. ...  
 S. Balan ...

**SCHEME - BA- JOURNALISM AND MASS COMMUNICATION - 2021-22 ONWARDS**

**VI SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	21JH3601	MEDIA AND CULTURAL STUDIES	CR	5	1	-	-	6	*	***
2	119	21JH3602	COMMUNICATION RESEARCH	CR	5	1	-	-	6	*	***
<b>ANY ONE OF THE FOLLOWING COURSES SHOULD BE OPTED</b>											
3	119	21JH3603	PROJECT-LAB JOURNAL/BULLETIN	CR	-	-	-	12	6	*	***
4	119	21JH3604	PROJECT-DOCUMENTARY/PRODUCTION	CR	-	-	-	12	6	*	***
5	119	21JH3605	PROJECT-AD OR CORPORATE FILM/NEWSLETTER	CR	-	-	-	12	6	*	***
6	119	21JH3606	PROJECT-DEVELOPMENT COMMUNICATION	CR	-	-	-	12	6	*	***
					-	-	-	-	18		

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CIA – Continuous Internal Assessment


  
 Vikram

**ADDITIONAL COURSES TO BE STUDIED**

**FOR**

**BA (HONS) – JOURNALISM AND MASS COMMUNICATION – 2021-22 ONWARDS**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					SEMESTER AT WHICH COURSE TO BE OPTED
					L	T	P	S/P	C	
1	119	21JH2406	MEDIA, GENDER AND HUMAN RIGHTS	CR	5	1	-	-	6	III
2	119	21JH3507	MEDIA BUSINESS	CR	5	1	-	-	6	V
3	119	21JH3607	POLITICAL COMMUNICATION	CR	5	1	-	-	6	VI
					15	3	-	-	18	

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits,  
CIA – Continuous Internal Assessment

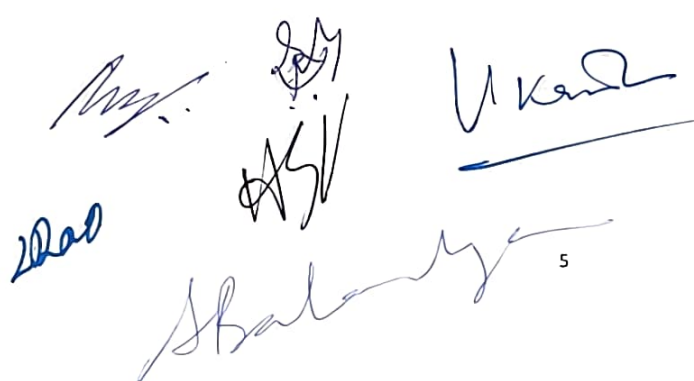
*My*  
*2020*  
*2020*  
*V. K. K.*  
*7*

**SCHEME – BA(HONS) – JOURNALISM– 2019 -20 ONWARDS**

**V SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	118	19JH3501	MEDIA BUSINESS	CR	5	1	-	-	6	***	***
2	118	19JH3502	POLITICAL PHILOSOPHY	CR	5	1	-	-	6	***	***
<b>ANY TWO OF THE FOLLOWING COURSES SHOULD BE OPTED</b>											
3	118	19JH3503	EDITING AND PRODUCTION FOR PRINT AND ONLINE	CR	3	-	6	-	6	***	***
4	118	19JH3504	SHORT FILM PRODUCTION	CR	3	-	6	-	6	***	***
5	118	19JH3505	SOCIAL MEDIA MARKETING	CR	3	-	6	-	6	***	***
6	118	19JH3506	DEVELOPMENT COMMUNICATION	CR	5	1	-	-	6	***	***
					-	-	-	-	24		

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits


  
 (Signatures: 2020, [unclear], [unclear], [unclear], [unclear])

**SCHEME – BA(HONS) – JOURNALISM– 2019 -20 ONWARDS**

**VI SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	118	19JH3601	COMMUNICATION RESEARCH	CR	5	1	-	-	6	***	***
2	118	19JH3602	POLITICAL COMMUNICATION	CR	5	1	-	-	6	***	***
3	118	19JH3603	WORKSHOP – II	CR	1	1	-	-	2	***	***
<b>ANY ONE OF THE FOLLOWING COURSES SHOULD BE OPTED</b>											
4	118	19JH3604	PROJECT-LAB JOURNAL/BULLETIN	CR	-	-	-	12	6	***	***
5	118	19JH3605	PROJECT-DOCUMENTARY/PRODUCTION	CR	-	-	-	12	6	***	***
6	118	19JH3606	PROJECT-AD OR CORPORATE FILM/NEWSLETTER	CR	-	-	-	12	6	***	***
7	118	19JH3607	PROJECT-DEVELOPMENT COMMUNICATION	CR	-	-	-	12	6	***	***
					-	-	-	-	20		

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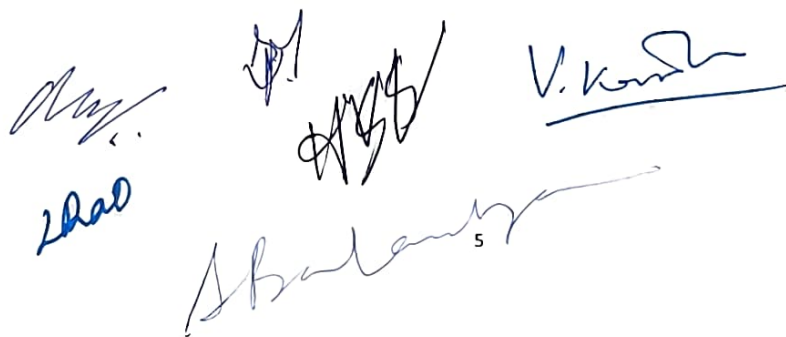
My: JPM HGN V K
   
 2020
   
 Abalambya 6

**SCHEME – BA- JOURNALISM AND MASS COMMUNICATION – 2020-21 ONWARDS**

**V SEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	20JH3501	SOCIOLOGY	CR	5	1	-	-	6	*	***
2	119	20JH3502	POLITICAL PHILOSOPHY	CR	5	1	-	-	6	*	***
<b>ANY TWO OF THE FOLLOWING COURSES SHOULD BE OPTED</b>											
3	119	20JH3503	EDITING AND PRODUCTION FOR PRINT AND ONLINE	CR	3	-	6	-	6	*	***
4	119	20JH3504	SHORT FILM PRODUCTION	CR	3	-	6	-	6	*	***
5	119	20JH3505	SOCIAL MEDIA MARKETING	CR	3	-	6	-	6	*	***
6	119	20JH3506	DEVELOPMENT COMMUNICATION	CR	5	1	-	-	6	*	***
					-	-	-	-	24		

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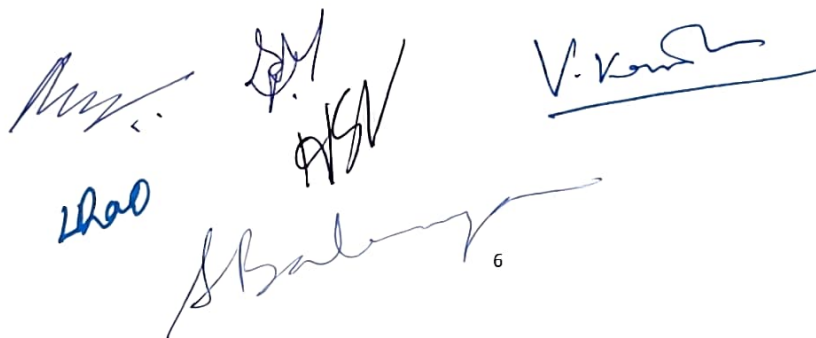

  
 V. K. K. S.

**SCHEME - BA- JOURNALISM AND MASS COMMUNICATION - 2020-21 ONWARDS**

**VLSEM**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING					PRE REQUISITE	
					L	T	P	S/P	C	SEM	COURSE CODE
1	119	20JH3601	COMMUNICATION RESEARCH	CR	5	1	-	-	6	*	***
2	119	20JH3602	INTERNSHIP	AU	-	-	-	12	-	*	***
<b>ANY ONE OF THE FOLLOWING COURSES SHOULD BE OPTED</b>											
3	119	20JH3603	PROJECT-LAB JOURNAL/BULLETIN	CR	-	-	-	12	6	*	***
4	119	20JH3604	PROJECT-DOCUMENTARY/PRODUCTION	CR	-	-	-	12	6	*	***
5	119	20JH3605	PROJECT-AD OR CORPORATE FILM/NEWSLETTER	CR	-	-	-	12	6	*	***
6	119	20JH3606	PROJECT-DEVELOPMENT COMMUNICATION	CR	-	-	-	12	6	*	***
					-	-	-	-	12		

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits, CIA - Continuous Internal Assessment


  
 Multiple handwritten signatures in blue ink, including names like 'V. Kumar' and 'S. Balaram'.



# DAYANANDA SAGAR UNIVERSITY

## PROCEEDINGS OF THE 9TH BOS MEETING

School : SCHOOL OF HEALTH SCIENCES  
College : COLLEGE OF PHYSIOTHERAPY  
Program/Department : BPT & MPT – PHYSIOTHERAPY  
Mode of BOS Held : Online  
Date : 09<sup>TH</sup> JULY 2021  
Venue : Google platform meet link - <https://meet.google.com/ibc-pkjt-mpg>  
Time : 11.00 AM to 12.30 PM

### • Members Present :

SL.No	Name	Designation & Affiliation		Signature
1.	Dr Pushpa Sarkar	Dean, SAHS	Co-opted Member	
2.	Dr Anil T John	Principal & Professor Musculoskeletal & Sports Physiotherapy, DSU.	Chairperson	
3.	Dr Savitha Ravindra	Dean of allied health sciences, RGUHS.	Member	
4.	Dr Arun Maiya	Dean – SOAHS, MAHE - Manipal University.	Member	
5.	Dr Saikumar N	Principal, Sanjay Gandhi Institute of Trauma & Orthopedics (Physiotherapy) Bangalore.	Member	
6.	Dr Mallikarjunaiah H	Professor/Principal Acharya's NR Institute of Physiotherapy, Bangalore.	Member	
7.	Dr Abraham M Joshua	Associate Professor, Dept of Physiotherapy, KMC Mangalore.	Member	
8.	Dr Srihari Sharma K N	Assistant Professor, Dept. of Cardio Respiratory Physiotherapy, DSU.	Member	
9.	Dr Vinodkumar K C	Assistant Professor, Dept of Musculoskeletal & Sports Physiotherapy, DSU.	Member	

### • Members Absent :

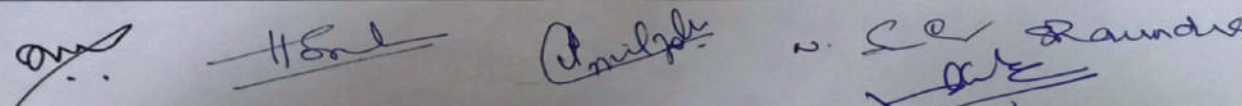
SL.No	Name	Designation & Affiliation	
1	Dr Sherin George	HOD , Dept. of Physiotherapy , HOSMAT Hospital	

• Agenda

SL.No	Particulars
1.	Review of regulations of UG and PG programs.
2.	Approval of program structure for BPT and MPT programs offered during the academic year 2021-22 including elective courses offered under MPT program.
3.	PG and Ph.D Guides and student ratio.
4.	NEP and its implications in Physiotherapy.
5.	Any other matter with the permission of the chair.

• Discussions on Agenda

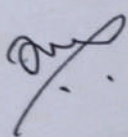
Agenda	Discussions Brief
1	<p>The minutes of the 8<sup>th</sup> BOS meeting held on 4<sup>th</sup> March 2020 was read and approved.</p> <p>In the UG regulation, 11.1, it states that "Normally a candidate should complete all the requirements for undergraduate programme in Four and a half years. However, academically weaker candidates who do not fulfil some of the requirements in their first attempt and have to repeat them in subsequent semesters may be permitted up to Eight consecutive years (from the first year of registration) to complete all the requirements of the degree". There was ambiguity in the statement and it needs to be clarified whether the period of internship has to be considered in calculating the maximum duration allowed for fulfilling all requirements of the degree.</p>
2	<p>The program structures for the programs that will be offered during the Academic Year 2021-22 (including 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> Year BPT as well as 1<sup>st</sup> and 2<sup>nd</sup> Year MPT) was presented before the BOS. The list of Elective courses that will be offered during the 2<sup>nd</sup> Year MPT program was also presented.</p>
3	<p>MPT regulation PG 9.5.2 states that "The Guide must be a teacher with MPT qualification with a minimum of 5 years of fulltime experience". Here, there is a necessity to spell out clearly that it should be 'post- PG experience'. It should be rephrased as " a teacher with MPT qualification with a minimum of 5 years full time post PG experience'.</p> <p>It was discussed that publication should also be considered as a criteria to be qualified for MPT guide. The points discussed were, that since assistant professor or associate professor is the current qualification required, as of now, it may not be advised to consider the publication criteria to be qualified for PG guide. However, 5 years post PG, the faculty owe to have at least 2 publications as 1st, 2nd or corresponding author. The DSU practice is to consider indexed unpaid journal as a priority and hence it may be considered to have 2 publications with Scopus/ Web of Science index. Since the DSU Ph D guidelines states similar credentials following Ph D degree to qualify as Ph D guide, it may not be appropriate to emphasise on Scopus and Web of Science indexed journals alone, but to consider even the journals listed in UGC care list as well since it is also well accepted academically. Further, it was pointed out that usually post MPT, within 5 years, the faculty may not get a chance to have his/her own project to be the first author, neither he/ she can be the second</p>

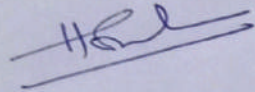


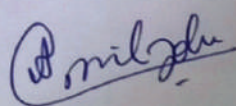
	author given that he/ she would not have a chance to guide any project worth publishing. It would not be appropriate to mandate for a MPT guide to be either first/ second/ corresponding author.
4	The possible implication of NEP on physiotherapy education was discussed. Dr Arun Maiya, who happens to be one of the NEP advisory committee members, shared some valuable information in this regard.
5	It was mentioned that the National commission for allied health care was almost unfolded and that physiotherapy profession will be allowed under the act. However, the analysis of the stakeholders' feedback on curriculum being offered currently at DSU was presented.

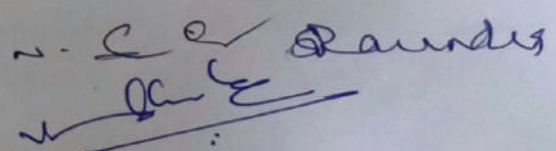
• Final Decisions/Resolutions/Recommendations

Agenda	Decisions/Resolutions/Recommendations
1	UGC norm states it as "double the program duration". As per this, the program duration for BPT is 4.5 years since internship is a part of the program and it is termed as the 'Compulsory Internship'. Since 6 months of internship is very much a part of the curriculum, 8 years and 6 months was unanimously accepted by all members.
2	During the 3 <sup>rd</sup> BOS meeting held on 4 <sup>th</sup> January 2016, there was a discussion on the recommendation of UGC regarding the Choice Based Credit System (CBCS). There was a consensus among the members that CBCS may not be suitable for a health science program like Physiotherapy as of now. However, the students are offered Elective Courses under the MPT program, the details of which are attached with his document. The program structures of both BPT and MPT programs that will be offered during the academic year 2021-22 were unanimously approved at the BOS meeting
3	<p>"The guide must be a teacher with MPT qualification with a minimum of 5 years full time post PG experience".</p> <p>It may be stated that to qualify to be a MPT guide, the faculty shall be one of the authors for a publication in an indexed journal.</p> <p>Ph D qualified MPT guides: Taking into account that a Ph D scholar will be actively involved in research and a considerable amount of UG and PG teaching activities during the Ph.D tenure, a minimum of 2 years of teaching experience post Ph D with all other criteria fulfilled shall qualify for MPT guide ship.</p> <p>In case of electives such as women health, where there is a dearth in qualified MPT guides, guides specialized in the closest subject area shall be assigned to guide the MPT students for a certain period of time until the speciality area attain independence.</p> <p>To be called as a co-guide, he/ she shall fulfil all the criteria laid down to be qualified as a guide.</p>





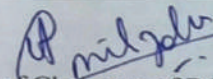


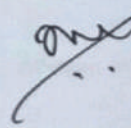
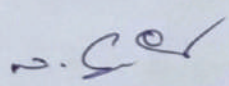
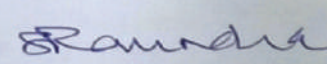
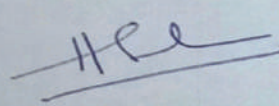
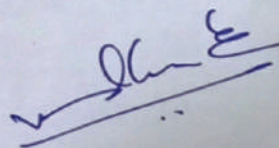


	Co-guides shall be assigned to bridge the gap in the domain knowledge for a MPT project. For example, for a MPT project in the area of women health, if the guide, who is required to be a full time faculty of the college of physiotherapy belongs to cardio-pulmonary speciality, there shall be a provision to assign a gynaecologist as the co-guide. It has to be noted that in any case, to guide a MPT student, the guide shall be from the physiotherapy faculty.
4	It was stated that, as of now, it is not proposed to bring about any drastic changes under the NEP in the health care programs (especially certificate courses and diploma courses). The only proposal is integrating masters with Ph D.
5	The syllabi are also due for revision and is being planned once the commission is launched. The conventional guidelines for physiotherapy education shall be continued till the commission comes in place. Hence major policy decisions regarding the same not be taken at this juncture. Also, since the analysis report of the feedback on curriculum collected from the stakeholders indicated an overall satisfaction with respect to the content of the curriculum, there was a consensus among the members that further feedback reports shall stipulate the further course of action in this regard.

• List of Enclosures based on the Decisions/Resolutions/Recommendations submitted :

Agenda	Particulars
1	Minutes of 3 <sup>rd</sup> BOS meeting.
2	List of elective courses offered under the MPT program- 'Elective/ Specialization groups'.

  
 Signature of Chairman of BOS with Date



**Master of Physiotherapy (MPT) Program structure**

Course Code	Course	Total Marks
15MPT501	Research and Administration	100
15MPT502	Applied Sciences	100
15MPT503	Functional Diagnosis and Therapeutics	150
15MPT571	Clinical Training	
15MPT572	Functional Diagnosis and Therapeutics	100
15MPT581	Dissertation	
<b>Total</b>		<b>450</b>

Course Code	Course	Total Marks
15MPTY601	Specialty General	150
	Recent Advances and Evidence Based Practice	
15MPTY602		100
15MPTY62X	Specialty Elective	150
15MPT672	Specialty General	100
15MPT673	Specialty Elective	100
15MPT681	Dissertation	100
<b>Total</b>		<b>700</b>

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 PRINCIPAL  
 College of Physiotherapy  
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 Bangalore 560 078

**DAYANANDA SAGAR UNIVERSITY**

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**SCHOOL OF HEALTH SCIENCES**

**COLLEGE OF PHYSIOTHERAPY**



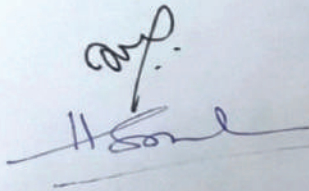
**SCHEME & SYLLABUS  
FOR  
MASTER OF PHYSIOTHERAPY (MPT)  
ACADEMIC YEAR 2021-22**

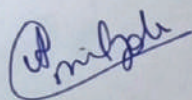
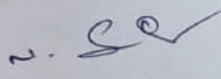
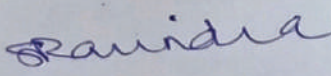
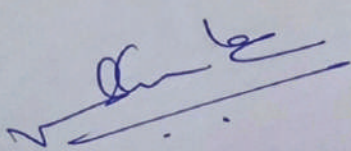


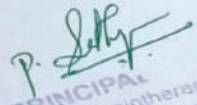
YEAR - I

SL	COURSE CODE	COURSE TITLE	NO. OF TEACHING HOURS			SCHEME OF EVALUATION							TOTAL
			D	CL	C	THEORY				PRACTICAL			
						W	VV	CA	IA	P	CA	IA	
1	15MPT501	RESEARCH AND ADMINISTRATION	01		01	80		10	10				100
2	15MPT502	APPLIED SCIENCES	01	02	02	80		10	10				100
3	15MPT503	FUNCTIONAL DIAGNOSIS AND THERAPEUTICS	02	--		100	30	10	10				150
4	15MPT571	CLINICAL TRAINING	--	24	12								
5	15MPT572	FUNCTIONAL DIAGNOSIS AND THERAPEUTICS	--	04	02					80	10	10	100
6	15MPT581	DISSERTATION	--	--	05								
<b>GRAND TOTAL</b>			<b>04</b>	<b>30</b>	<b>22</b>	<b>260</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>80</b>	<b>10</b>	<b>10</b>	<b>450</b>

Note: CR – Credit Subject, AU – Audit Subject, D – Didactic, CL – Clinical, P – Practical, C – No. of Credits, W – Written, VV – Viva Voce, CA – Continuous Assessment, IA – Internal Assessment

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**PRINCIPAL**  
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 Dayananda Sagar University  
 Bangalore 560 078

YEAR - II

S L	COURSE CODE	COURSE TITLE	NO. OF TEACHING HOURS			SCHEME OF EVALUATION							TOTAL
			D	CL	C	THEORY				PRACTICAL			
						W	VV	CA	IA	P	CA	IA	
1	15MPTY601	SPECIALTY GENERAL	02	--	02	100	30	10	10				150
2	15MPTY602	RECENT ADVANCES AND EVIDENCE BASED PRACTICE	01	--	01	80		10	10				100
3	15MPTY62X	SPECIALTY ELECTIVE	01	--	01	100	30	10	10				150
4	15MPT671	CLINICAL TRAINING	--	24	12								
5	15MPTY672	SPECIALTY GENERAL	--	02	01					80	10	10	100
6	15MPTY673	SPECIALTY ELECTIVE	--	04	02					80	10	10	100
7	15MPT681	DISSERTATION	--	--	10		80	20					100
<b>GRAND TOTAL</b>			<b>04</b>	<b>30</b>	<b>29</b>	<b>280</b>	<b>140</b>	<b>50</b>	<b>30</b>	<b>160</b>	<b>20</b>	<b>20</b>	<b>700</b>

**Note:** CR – Credit Subject, AU – Audit Subject, D – Didactic, CL – Clinical, P – Practical, C – No. of Credits,  
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 Bangalore - 560 077

**ELECTIVE / SPECIALIZATION GROUPS**

**1. ORTHOPAEDICS:**

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
15MPTO601	MUSCULO SKELETAL DISORDER	15MPTN601	NEURO PSYCHOSOMATIC DISORDERS
15MPTO602	RECENT ADVANCES AND EVIDENCE BASED PRACTICE	15MPTN602	RECENT ADVANCES AND EVIDENCE BASED PRACTICE
15MPTO621	MANUAL THERAPY	15MPTN621	ADULT NEUROLOGY
15MPTO622	SPORTS REHABILITATION	15MPTN622	PEDIATRIC NEUROLOGY

**2. NEURO SCIENCES:**

**3. CARDIOPULMONARY SCIENCES:**

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
15MPTP601	CARDIOPULMONARY DISORDER	15MPTC601	COMMUNITY BASED REHABILITATION
15MPTP602	RECENT ADVANCES AND EVIDENCE BASED PRACTICE	15MPTC602	RECENT ADVANCES AND EVIDENCE BASED PRACTICE
15MPTP621	INTENSIVE CARE MANAGEMENT	15MPTC621	GERIATRICS
15MPTP622	CARDIOPULMONARY REHABILITATION AND FITNESS	15MPTC622	OCCUPATIONAL HEALTH

**4. COMMUNITY PHYSIOTHERAPY:**

**5. WOMEN HEALTH AND PAEDIATRIC:**

COURSE CODE	COURSE TITLE
15MPTW601	OBG AND PEDIATRIC CARE
15MPTW602	RECENT ADVANCES AND EVIDENCE BASED PRACTICE
15MPTW621	WOMEN HEALTH
15MPTW622	PAEDIATRIC REHABILITATION

*P. Sathy*  
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 Dayananda Senior University  
 Bangalore

*Amilzoh*      *S.S.S*      *Saindy*  
*and*      *H.S.*      *[Signature]*



**DAYANANDA SAGAR UNIVERSITY**

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Bengaluru-560078, Karnataka.

**SCHOOL OF HEALTH SCIENCES**

**COLLEGE OF PHYSIOTHERAPY**



**SCHEME & SYLLABUS  
FOR  
BACHELOR OF PHYSIOTHERAPY (BPT)  
ACADEMIC YEAR 2021-22**



YEAR - I

SL.	COURSE CODE	COURSE TITLE	M / S	NO. OF TEACHING HOURS			SCHEME OF EVALUATION							TOTAL
				D	CL	P	THEORY				PRACTICAL			
							W	VV	CA	IA	P	CA	IA	
1	17PT101	HUMAN ANATOMY	M	04	--	-	100	30	10	10	--	--	--	150
2	17PT102	HUMAN PHYSIOLOGY	M	05	--	-	100	30	10	10	--	--	--	150
3	17PT103	BIOCHEMISTRY	M	02	--	-	80	--	10	10	--	--	--	100
4	17PT104	KINESIOLOGY	M	04	--	-	100	30	10	10	--	--	--	150
5	17PT105	PSYCHOLOGY (SEC- A)	M	02	--	-	40	--	05	05	--	--	--	50
	17PT106	SOCIOLOGY (SEC - B)	M	02	--	-	40	--	05	05	--	--	--	50
6	17PT171	HUMAN ANATOMY	M	--	--	4	--	--	--	--	40	05	05	50
7	17PT172	HUMAN PHYSIOLOGY	M	--	--	2	--	--	--	--	40	05	05	50
8	17PT173	KINESIOLOGY	M	--	--	2	--	--	--	--	40	05	05	50
<b>GRAND TOTAL</b>				<b>19</b>	<b>--</b>	<b>8</b>	<b>460</b>	<b>90</b>	<b>50</b>	<b>50</b>	<b>120</b>	<b>15</b>	<b>15</b>	<b>800</b>
9	17PT191	BASIC NURSING / FIRST AID & CPR	S	02	--	-	40	--	10	--	--	--	--	50
10	17PT192	ENGLISH	S	02	--	-	40	--	10	--	--	--	--	50
11	17PT193	KANNADA	S	01	--	-	40	--	10	--	--	--	--	50
12	17PT194	ORIENTATION TO PHYSIOTHERAPY	S	01	--	-	40	--	10	--	--	--	--	50
13	17PT195	INDIAN CULTURE & HERITAGE	S	01	--	-	40	--	10	--	--	--	--	50
<b>GRAND TOTAL</b>				<b>07</b>	<b>--</b>	<b>-</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>TOTAL NUMBER OF HOURS/WEEK</b>				<b>34</b>	<b>--</b>	<b>-</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

Note: M - Main Course, S - Subsidiary Course, D - Didactic, CL - Clinical, P - Practical, W - Written, VV - Viva Voce, CA - Continuous Assessment, IA - Internal Assessment

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 PRINCIPAL  
 College of Physiotherapy  
 Government Medical College  
 Bangalore

YEAR - II

SL. NO	COURSE CODE	COURSE TITLE	M / S	NO. OF TEACHING HOURS			SCHEME OF EVALUATION						TOTAL	
				D	C L	P	THEORY				PRACTICAL			
							W	VV	CA	IA	P	CA		IA
1	17PT201	PATHOLOGY (SECTION A)	M	02	--	--	40	--	05	05	--	--	--	50
	17PT202	MICROBIOLOGY (SECTION B)	M	02	--	--	40	--	05	05	--	--	--	50
2	17PT203	PHARMACOLOGY	M	02	--	--	80	--	10	10	--	--	--	100
3	17PT204	EXERCISE THERAPY	M	04	--	--	100	30	10	10	--	--	--	150
4	17PT205	ELECTRO THERAPY	M	04	--	--	100	30	10	10	--	--	--	150
5	17PT271	EXERCISE THERAPY	M	--	--	06	--	--	--	--	40	05	05	50
6	17PT272	ELECTRO THERAPY	M	--	--	06	--	--	--	--	40	05	05	50
<b>GRAND TOTAL</b>				<b>14</b>	<b>--</b>	<b>12</b>	<b>360</b>	<b>60</b>	<b>40</b>	<b>40</b>	<b>80</b>	<b>10</b>	<b>10</b>	<b>600</b>
7	17PT291	PERSONALITY DEVELOPMENT & SOFT SKILLS & COMMUNICATION	S	02	--	--	40	--	10	--	--	--	--	50
8	17PT292	COMPUTER APPLICATION & ANIMATION	S	02	--	--	40	--	10	--	--	--	--	50
9	17PT293	PROFESSIONAL CONDUCT & ETHICS/CLINICAL OBSERVATION POSTING	S	02	--	--	40	--	10	--	--	--	--	50
10	17PT294	CONSTITUTION OF INDIA	S	01	--	--	40	--	10	--	--	--	--	50
11	17PT295	ENVIRONMENTAL SCIENCE	S	01	--	--	40	--	10	--	--	--	--	50
<b>GRAND TOTAL</b>				<b>08</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>TOTAL NUMBER OF HOURS/WEEK</b>				<b>34</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

Note: M- Main Course, S - Subsidiary Course, D - Didactic, CL - Clinical, P - Practical, W - Written, VV - Viva Voce, CA - Continuous Assessment, IA - Internal Assessment

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 P. Sethy  
 PRF/CIPAA  
 College of Physiotherapy  
 Manipal Institute of Health Sciences  
 Bangalore - 560 076

YEAR - III

S L.	COURSE CODE	COURSE TITLE	M / S	NO. OF TEACHING HOURS			SCHEME OF EVALUATION							TOTAL
				D	CL	P	THEORY				PRACTICAL			
							W	VV	CA	IA	P	CA	IA	
1	17PT301	GENERAL MEDICINE	M	02	--	--	80	--	10	10	--	--	--	100
2	17PT302	GENERAL SURGERY	M	02	--	--	80	--	10	10	--	--	--	100
3	17PT303	ORTHOPEDIC & TRAUMATOLOGY	M	02	--	--	80	--	10	10	--	--	--	100
4	17PT304	ORTHOPEDICS & SPORTS PHYSIOTHERAPY	M	02	--	--	100	30	10	10	--	--	--	150
5	17PT305	CARDIO RESPIRATORY & GENERAL PHYSIOTHERAPY	M	02	--	--	100	30	10	10	--	--	--	150
6	17PT371	ORTHOPEDICS & SPORTS PHYSIOTHERAPY	M	--	--	02	--	--	--	--	40	05	05	50
7	17PT372	CARDIO RESPIRATORY & GENERAL PHYSIOTHERAPY	M	--	--	02	--	--	--	--	40	05	05	50
8	17PT373	SUPERVISED CLINICAL TEACHING	M	--	20	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>				<b>10</b>	<b>20</b>	<b>04</b>	<b>440</b>	<b>60</b>	<b>50</b>	<b>50</b>	<b>80</b>	<b>10</b>	<b>10</b>	<b>700</b>
<b>TOTAL NUMBER OF HOURS/WEEK</b>				<b>34</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

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Bangalore - 560 078

YEAR - IV ( BPT)

S L	COURSE CODE	COURSE TITLE	M / S	NO. OF TEACHING HOURS			SCHEME OF EVALUATION							TOTAL
				D	CL	P	THEORY				PRACTICAL			
							W	VV	CA	IA	P	CA	IA	
1	17PT401	NEUROLOGY & NEUROSURGERY	M	02	--	--	80	--	10	10	--	--	--	100
2	17PT402	COMMUNITY MEDICINE	M	02	--	--	80	--	10	10	--	--	--	100
3	17PT403	NEURO - PHYSIOTHERAPY	M	02	01	--	100	30	10	10	--	--	--	150
4	17PT404	COMMUNITY BASED REHABILITATION	M	02	01	--	100	30	10	10	--	--	--	150
5	17PT405	RESEARCH METHODOLOGY & BIostatISTICS	M	02	--	--	80	--	10	10	--	--	--	100
6	17PT471	NEURO PHYSIOTHERAPY	M	--	--	02	--	--	--	--	40	05	05	50
7	17PT472	COMMUNITY BASED PHYSIOTHERAPY	M	--	--	02	--	--	--	--	40	05	05	50
8	17PT473	SUPERVISED CLINICAL TRAINING	M	--	18	--	--	--	--	--	--	--	--	--
9	17PT491	PROJECT	S	01	--	--	--	--	--	--	--	--	--	--
<b>GRAND TOTAL</b>				<b>11</b>	<b>20</b>	<b>04</b>	<b>440</b>	<b>60</b>	<b>50</b>	<b>50</b>	<b>80</b>	<b>10</b>	<b>10</b>	<b>700</b>
<b>TOTAL NUMBER OF HOURS/WEEK</b>				<b>35</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

*Amal jaha*  
*Hand*  
*amp*  
*S.S.C*  
*Raundia*  
*Hand*

*P. Sethy*  
 PRINCIPAL  
 College of Physiotherapy  
 Gayatri Road, Cuttack, Odisha  
 Telephone: 250 078



**DAYANANDA SAGAR UNIVERSITY  
SCHOOL OF BASIC AND APPLIED SCIENCES  
DEPARTMENT OF BIOLOGICAL SCIENCES**

**DOCUMENT TITLE:** BOARD OF STUDIES MEETING, DSU

**DATE:** 15-07-2020

**AGENDA OF THE MEETING:**

1. Proposing new course matrix scheme for all six semesters of BSc as per choice based credit system (CBCS) guidelines
2. Approval of 1<sup>st</sup> year BSc syllabus as per new course matrix
3. Minor changes in the course matrix of BSc (2019-2020 scheme) in CIA: SEE (from 50:50 to 60:40 scheme)
4. Minor changes in the course matrix of MSc (2019-2020 scheme) in CIA: SEE (from 50:50 to 60:40 scheme)
5. Approval for new MSc programme - MSc Genetics course matrix
6. Approval for 1<sup>st</sup> year syllabus for MSc Genetics
7. Approval for minor degree (Bioinformatics, Molecular Biotechnology, Food Science)
8. Approval for short term certificate courses

1. Dr. Sunil More  
Chairman - B.O.S.  
Dean - SBAS,  
DayanandaSagar University,  
Bangalore.

2. Dr. Harish Pai  
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**Proceedings of the B.O.S Meeting Dayananda Sagar University, held on 15.07.2020**

Due to the present pandemic situation, it was not possible to hold the BOS meeting in the campus. The revised course matrix and syllabus for BSc and MSc, newly formed syllabus of MSc (Genetics), minor degree and certificate courses were sent to BOS members via email for their valuable inputs, providing them with a weeks' time. All the members have suggested no changes in the proposed syllabus, barring one minor change which is mentioned below:

**Annexure 4:**

Module 2: Inborn Errors of Metabolism

In disorders of aminoacid metabolism – Oculocutaneous albinism is replaced with Maple Syrup Urine Disease (as suggested by Dr. Rita Christopher).

I thank all the BOS members, for investing valuable time and giving constructive inputs in our new curriculum development. In spite of the difficulties of present pandemic situation the timely completion of the assignment is very much appreciated.

Date:23-07-2020

Place:Bangalore

*23/07/2020*

**Chairman BOS**

**Dr. Sunil S More**  
**Professor & Dean**

**School of Basic & Applied Sciences,**  
**Dayananda Sagar University,**  
**K. S. Layout, Bengaluru-78**



**DAYANANDA SAGAR UNIVERSITY  
SCHOOL OF BASIC AND APPLIED SCIENCES  
DEPARTMENT OF BIOLOGICAL SCIENCES**

**DOCUMENT TITLE:** BOARD OF STUDIES MEETING of B.Sc. and M.Sc.,  
School of Basic and Applied Sciences, DSU

**DATE:** 24/04/2021

**TIME:** 9.30 AM

**VENUE:** Online through zoom link

**AGENDA OF THE MEETING:**

1. Proposing new course matrix scheme for BSc (Applied Biology) four years program as per choice-based credit system (CBCS) guidelines.
2. Approval for 1<sup>st</sup> year BSc syllabus as per new course matrix for the new BSc Applied Biology program.
3. Approval for BSc 2<sup>nd</sup> year syllabus (3<sup>rd</sup> and 4<sup>th</sup> semester) as per course matrix for the 2020-2021 batch.
4. Approval for BSc 3<sup>rd</sup> year syllabus (5<sup>th</sup> and 6<sup>th</sup> semester) as per course matrix for the 2019-2020 batch.
5. Change of elective paper from Industrial Biotechnology to Clinical Toxicology in course matrix of BSc 6<sup>th</sup> semester for 2019-20 Batch.
6. MSc Human Genetics - Approval for 2<sup>nd</sup> year syllabus.
7. Any other matter with the permission of Chair.

**BOS MEMBERS:**

1. Dr. Sunil More  
Chairman - B.O.S.  
Dean - SBAS,  
Dayananda Sagar University,  
Bengaluru.
2. Dr. Harish Pai  
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[manjulang-sbas@dsu.edu.in](mailto:manjulang-sbas@dsu.edu.in)

Name of the BOS Member – <b>PRESENT</b>	
1.	Dr. Sunil More
2.	Dr. P Kondaiah
3.	Dr. Harish Pai
4.	Dr. Sundaram P M
5.	Dr. Manjunath K
6.	Dr Girish S K
7.	Dr. Anirudha Lakshminarasimhan
8.	Dr. Dinesh M Gowda
9.	Dr. Manjula N G

Name of the BOS Member - <b>ABSENTEES</b>	
1.	Dr. Sidhalingamurthy
2.	Dr. Rita Christopher



**DAYANANDA SAGAR UNIVERSITY  
SCHOOL OF BASIC AND APPLIED SCIENCES  
DEPARTMENT OF BIOLOGICAL SCIENCES**

**DOCUMENT TITLE:** BOARD OF STUDIES MEETING of B.Sc. and M.Sc.,  
School of Basic and Applied Sciences, DSU

**DATE:** 24/04/2021

**TIME:** 9.30 AM

**VENUE:** Online Meeting, through zoom link

Members present:

<b>Sl. No</b>	<b>Name of members</b>	<b>Designation</b>	<b>Signature</b>
<b>1</b>	Dr. Sunil More	Chairman	
<b>2</b>	Dr. P Kondaiah	External member	
<b>3</b>	Dr. Harish Pai	External member	
<b>4</b>	Dr. Sundaram P M	External member	
<b>5</b>	Dr. Manjunath K	External member	
<b>6</b>	Dr Girish S K	External member	
<b>7</b>	Dr. Anirudha Lakshminarasimhan	External member	
<b>8</b>	Dr. Dinesh M Gowda	Internal member	
<b>9</b>	Dr. Manjula N G	Internal member	

**Proceedings of the B.O.S Meeting Dayananda Sagar University, held on 24.04.2021**

Due to the present pandemic situation, it was not possible to hold the BOS meeting in the campus. The meeting was held through virtual meet. The revised syllabus for BSc 2019-2020 (5<sup>th</sup> and 6<sup>th</sup> semester), BSc 2020-2021 (3<sup>rd</sup> and 4<sup>th</sup> semester), MSc (Genetics) syllabus for 2<sup>nd</sup> year, certificate courses and Course matrix for New BSc 4 years Program (Applied Biology) was sent to the BOS members via email for their kind perusal.

- The Board of studies meet was conducted virtually through zoom link on 24.04.2021 from 9.30 am.
- The Chairman, Dr Sunil S More welcomed all the members of the board and initiated the meeting.
- The agenda of the current meeting was briefed by the Chairman.
- Board Members took up the appropriate decisions on all the agendas of the meeting after a detailed deliberation.
- The course matrix needs to be revised and therefore the syllabus has been kept for further consideration.

**AGENDA I:** Approval for BSc 2<sup>nd</sup> year syllabus (3<sup>rd</sup> and 4<sup>th</sup> semester) as per course matrix for the 2020-2021 batch. **(ANNEXURE 1)**

- A comprehensive syllabus was presented before the BOS members during the online meet.
- After detailed deliberation, BOS members suggested few changes in the papers. **APPLIED GENETICS (20GN2401)** – for 2<sup>nd</sup> year (4<sup>th</sup> semester) has been revised as per the suggestions given by the members. The Module 2, now includes both animal and plant tissue culture concepts as earlier version had only on plant tissue culture.
- Module 4 has been renamed from “Genetics in Medical and Industry” to **“Genetics in medical and Industrial Biotechnology”**.
- **TECHNIQUES IN rDNA TECHNOLOGY-LAB (20BT2371):** Practical were fine-tuned with the suggestions given by BOS members. Where in, the word “chemical” has been deleted from the practical component like chemically competent cells and chemical transformation.

**AGENDA II:** Approval for BSc 3<sup>rd</sup> year syllabus (5<sup>th</sup> and 6<sup>th</sup> semester) as per course matrix for the 2019-2020 batch. **(ANNEXURE 2)**

- For the 6<sup>th</sup> Semester paper **19GN3601 - APPLIED GENETICS AND GENOMICS** that was presented during the meet was asked to modify with respect to the Module 4. As per the suggestions given, the module 4 includes a component on Proteomics.
- **Elective paper II** in 6<sup>th</sup> Semester, MATERIAL SCIENCE (19OE3602) was advised to change the Title from “Material Science to INDUSTRIAL MATERIALS (19OE3602)”. Since, the latter denoted the subject as vast area the title has been changed on the advice of the BOS members as **INDUSTRIAL MATERIALS (19OE3602)**.
- **Elective paper I** in 5<sup>th</sup> Semester, **Health and Diseases (19OE3502)** has been revised as per the suggestions.

**AGENDA III:** Change of elective paper from Industrial Biotechnology to **Principles of Clinical Toxicology (19OE3601)** in course matrix of BSc 6<sup>th</sup> semester for 2019-20 Batch.

- As per the course matrix the subject Industrial Biotechnology reflected the syllabus almost similar to Fermentation technology (**19OE3601**).
- Hence, with the permission and after the syllabus approval the paper has been approved for **PRINCIPLES OF CLINICAL TOXICOLOGY-19OE3601** for 6<sup>th</sup> semester instead of Fermentation technology.
- BOS members also suggested to include the Eligibility criteria for the open electives.
- Eligibility criteria for **PRINCIPLES OF CLINICAL TOXICOLOGY-(19OE3601)** is open to students who have a course of Animal and Clinical Physiology.

**AGENDA IV:** MSc Human Genetics - Approval for 2<sup>nd</sup> year syllabus. **(ANNEXURE 3)**

- BOS members suggested to modify the paper “**20MHG5371-LABORATORY EXERCISE IN MEDICAL AND CANCER GENETICS**”. It was advised by the members to delete the 4<sup>th</sup> experiment-“Isolation of mRNA by triazole method.” The necessary changes have been made as per suggestions.

- Title of elective paper “20MHG5322-HUMAN BEHAVIORAL AND REPRODUCTIVE GENETICS” was suggested to change as “**DEVELOPMENTAL AND REPRODUCTIVE GENETICS (20MHG5322)**”. The title and two modules of the syllabus for the same has been modified as per the suggestions received from the BOS members.
- Title of 4<sup>th</sup> module of the paper “DEVELOPMENTAL AND REPRODUCTIVE GENETICS” has been modified as per the suggestions of the BOS members as “**GENETICS OF INFERTILITY AND ASSISTED REPRODUCTIVE TECHNIQUES**” instead of “GENETICS OF INFERTILITY AND REPRODUCTIVE OPTIONS”.

**AGENDA V:** Any other matter with the permission of Chair.

- **FERMENTATION TECHNOLOGY (19BT3601)** BSc -2019, 6<sup>th</sup> Semester.  
The module has been added with the heading as follows.  
Module 1: Introduction to fermentation technology as heading.
- **INDUSTRIAL, FOOD AND DAIRY MICROBIOLOGY (20MB2401)** BSc-2020, 4<sup>th</sup> Semester.  
Approval for the change of course title from Food and Industrial Microbiology (20MB2401) to “**Industrial, Food and Dairy Microbiology (20MB2401)** and to retain the same course code.
- **Short certificate courses** were approved by the BOS members after revising the number of hours to be increased to 30 hours.

**AGENDA VI:** New proposed course matrix scheme for BSc (Applied Biology).  
**(ANNEXURE 4)**

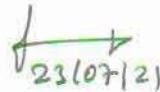
- The four years program as per choice-based credit system (CBCS) guidelines was discussed with the Board of members.
- Committee members suggested that there is a **need for further detailed deliberation** with respect to the course matrix pertaining to addition of Basics and taking in consideration with other departments.
- BOS members also suggested that the similar core subjects can be planned simultaneously with the other BSc programs.
- Members suggested to add Project I and Project II in the 7<sup>th</sup> and 8<sup>th</sup> semesters instead of Dissertation/Minor project.

**AGENDA VII:** Approval for 1<sup>st</sup> year BSc syllabus as per new course matrix for the new BSc Applied Biology program.

- The course matrix needs to be revised and therefore the syllabus has been kept for further consideration.
- With respect to this **in coming weeks we plan to hold a meeting for reviving** the Course matrix and the Syllabus for 1<sup>st</sup> year.
- Hence, the New program needs few more discussions and meetings to make the course and syllabus better for the New BSc 4 years program.

We, thank all the BOS members, for investing their valuable time and giving constructive inputs for the curriculum development. In spite of all the difficulties in this present pandemic situation the timely completion of the assignment is very much appreciated.

**Date: 24-04-2021**  
**Place: Bangalore**

  
23/07/21

**Chairman BOS**

**Dr. Sunil S More**  
Professor & Dean  
School of Basic & Applied Sciences,  
Dayananda Sagar University,  
K. S. Layout, Bengaluru-78



Dayananda Sagar  
University

## Dayananda Sagar University

### School of commerce and Management studies

#### Proceedings of BOS UG Program

Venue: Virtual Platform

Time: 2.00 – 4.00PM

Date: 24-03-2021

#### Members Present:

1. Dr. Punith Cariappa, Prof. & Dean, SCMS- Chairperson-BOS
2. Dr. K Erasi, Professor/Dean/Chairman, Bangalore University- Member BOS
3. Dr. B Mariyappa, Associate professor & HOD., BMS college for women  
airperson- BOS
4. Dr. S. Ramesh Dean Faculty of Commerce and Management Mount Carmel  
College-Autonomous-Member BOS
5. COL. V. Govindrajulu, President & CEO Cirlogix Technologies- Member  
BOS
6. Mr. Basanna Patagundi, Prof. & HOD., Dept of MBA, Cambridge Institute of  
technology-Member BOS
7. Dr. Jalaja K.R, Assistant Professor, Bangalore University Central University,  
Central College Campus-Member BOS
8. Mr. Kiran Bindu, Director Mentees Capital-Member BOS

#### Special Invites:

1. Mr. Suresh Mani
2. Mr. Vimal
3. Mr. Narayan Nambiyar
4. Mr. Subramani

#### Meeting Agenda-

##### The Curriculum of the following

1. Approval of BBA and B.Com Program structure for the academic year 2021-22
2. Discussion on the syllabus, specialisation and other elective courses
3. Other major changes on the curriculum/evaluation pattern
4. Discussion on the feedback from the stakeholder

The meeting Commenced with the chairperson Dr. Punith Cariappa, Dean school of commerce and Management Studies welcoming the BOS members. Each BOS member Introduced themselves Introduced themselves. She mentioned that it was an honor and privilege in hosting such enlightened and senior BOS member

*Punith*

*M*

The Context of the meeting was to discuss the needs of the present day in Framing the curriculum keeping in mind proper communication, Collaboration, and critical thinking. The focus was to develop syllabus and pedagogy which is industry relevant, Research oriented rigorous and contemporary which helps SCMS attain a unique positioning.

### Proceedings-Minutes of the meeting

Few of the points discussed to be incorporated and eliminated are:

- It was decided that all programs offered for the academic year 2021-22 will adhere to the Choice Based Credit System (CBCS) in accordance with the guidelines set by the UGC.
- The decision was made for all courses within the programs to follow the LTPC approach, which stands for lectures, tutorials, practicals, and ere its. This includes allocating an appropriate number of credits to each course based on its requirements.
- International taxation- AJI taxes to be thought for B. Com students which includes individual tax, Corporate tax and International Tax.
- GST Should include E waybill and other details.
- Income tax should. include all the assessment procedures of companies. Political parties, cooperatives, etc
- Business consulting and report writing and technical writing should be part of the project work in the final year which should be different from BBA project work.
- Business Communication portions should be similar to CA foundation portion.
- Banking should include corporate banking retail banking, investing banking, merchant banking and-case studies on latest bank mergers.
- Conflict management and negotiations skills should be part of the curriculum.
- Mergers and acquisition and valuation can be one of the subjects in B.com
- Corporate accounting should include holding company and subsidiary company.
- Micro economics and through understanding of interest rates in a must for B.com students.
- Remove outdated topics from advanced financial management and incorporate the latest topics.
- M.com in fintech sounds very innovative and need of the hour

*Ronald*  
M

## Discussions BBA

- It was decided that all programs offered for the academic year 2021-22 will adhere to the Choice Based Credit System (CBCS) in accordance with the guidelines set by the UGC.
- The decision was made for all courses within the programs to follow the LTPC approach, which stands for lectures, tutorials, practical's, and credits. This includes allocating an appropriate number of credits to each course based on its requirements.
- Strategic management should include Company analysis or internal environment analysis.
- Entrepreneur subject must be practical paper with more hands-on experience. You should include women entrepreneurs as it is a mandatory requirement.
- All management education managers should be tech savvy. Hence every subject must have a digital component, at least as a last module.
- Global business should include global business during pandemic.
- Marketing communication should not have any overlap and it can be a team teaching with academicians plus industrialists.
- Marketing research should be project based including YouTube analytics, Google Analytics and so on.
- All electives must be heavily applications oriented and practical.
- Financial specialisation can have subjects like mergers, acquisitions, corporate structuring.
- Digital marketing can have Euro course and digital supply chain.
- Instead of portfolio, it can be called SAPM Security analysis and portfolio management. Cryptocurrency can be included.
- Labour law should have the new changes in HR laws and laws connected with services and manufacturing.
- There can be a new paper or new subjects on business modules of organization structures.
- Taxation must have all 5 heads of income.
- Business Analytics: Analytical Tools-limit it to one or two and give deeper insights to the same


*Ranesh*  


## Resolutions

Agenda	Resolutions
Approval of BBA and B.Com Program structure for the academic year 2021-22	APPROVED
Discussion on the syllabus, specialisation and other elective courses	APPROVED WITH MINOR CHANGES
Other major changes on the curriculum/evaluation pattern	APPROVED WITH MINOR CHANGES
<b>Discussion on the feedback from the stakeholder</b>	
To provide business immersion project and more frequent Field Visits	ACCEPTED

*Rawal*  
*Q*

To start Short Term Programmes and certification program; and new programme	ACCEPTED
Overall, the employer's feedback was positive and reported that students exhibited a great interest in leaning new concepts and significant contribution to organisation objectives	ACCEPTED
Practical Training Session on different software and other statistical packages need to enhanced	ACCEPTED
More of Financial Modelling with Practical Exposure to be enriched	ACCEPTED
Focused majority on the Industry Academia Partnership for real time leering	ACCEPTED

  
 Dean

**Annexure 1: Program Structure for B.Com and BBA 2021-22**



**Dayananda Sagar University**  
**SCHOOL OF COMMERCE & MANAGEMENT STUDIES**  
**MEETING OF THE BOARD OF STUDIES**


Venue: Webinar

Time: 2.00 – 4.00 PM

Date: 24.03.2021

**Board of studies - UG Program**  
**Attendance Sheet**

Sl. No	Name of Members	Affiliation	Designation	Signature
1	Dr. Punith Canappa	Professor & Dean School of Commerce and Management Studies, Dayananda Sagar University.	Chairperson	Present - Online
2	Dr B. Mariyappa	Associate Professor & HOD., BMS College for Women	Member	Present - Online
3	Dr.S. Ramesh Dean	Faculty of Commerce & Management, Mount Carmel College- Autonomous	Member	Present - Online
4	Mr.Narayanan Namblar	Director, GLOBALFTI Private Limited	Member	Present - Online
5	COL V. Govindarajulu	President & CEO., Cirriogix Technologies	Member	Present - Online
6	Dr. K Eresi	Professor/ Dean/ Chairman, Bangalore University	Member	Present - Online
7	Mr. Seshu K.N	Professor Ex. Senior Manager SBI	Member	Absent
8	Mr. Basanna Patagundi	Prof. & HOD., Dept. of MBA., Cambridge Institute of Technology	Member	Present - Online
9	Dr. Jalaja K.R	Assistant Professor, Bangalore Central University, Central College Campus	Member	Present - Online
10	Mr. Kiran Bindu	Director, Mentees Capital	Member	Present - Online
11	Dr. Padmalatha	Assistant Professor - SCMS	Member	Absent

  
24/3/21  
DEAN - SCMS

**DAYANANDA SAGAR UNIVERSITY**  
**SHAVIGE MALLESHWARA HILLS, KUMARASWAMY**  
**LAYOUT BENGALURU-560078, KARNATAKA.**

**SCHOOL OF COMMERCE & MANAGEMENT STUDIES**



**SCHEME & SYLLABUS**

**B.Com and BBA**

**(With effect from 2021 – 22)**

**SCHEME —BCom— -2021 -22 ONWARDS**

**I SEM BCom**

SL	PROGRAM CODE	COURSECODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S /P	C
1			FINANCIAL ACCOUNTING	CR	3	1	-	-	4
2			ECONOMICS FOR BUSINESS	CR	3	-	-	-	3
3			PRINCIPLES OF MANAGEMENT	CR	4	-	-	-	4
4			ENGLISH	CR	2	-	-	-	2
5			ENVIRONMENTAL STUDIES	CR	2	-	-	-	2
6			MATHEMATICS FOR BUSINESS	CR	3	1	-	-	4
7			BUSINESS LAW	CR	4	-	-	-	4
					21	2	-	-	23
8			CONSTITUTION OF INDIA AND HUMAN RIGHTS	AU	2	-	-	-	-
9			SKILL ENHANCEMENT	AU	2	-	-	-	-

CR — Credit, AU — Audit, L — Lecture, T — Tutorial, P — Practical, S/P — Seminar/Project, C – No. of Credits

**SCHEME —BCom- 2021 -22 ONWARDS**  
**II SEM BCom**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S /P	C
1			QUANTITATIVE METHODS FOR BUSINESS	CR	3	1	-	-	4
2			MARKETING MANAGEMENT	CR	3	-	-	-	3
3			BUSINESS COMMUNICATION	CR	3	-	-	-	3
4			ADVERTISING & PUBLIC RELATIONS	CR	2	-	-	-	2
5			CORPORATE LAW	CR	4	-	-	-	4
6			ELEMENTS OF COSTING	CR	3	1	-	-	4
7			INCOME TAX	CR	3	1	-	-	4
8					21	3	-	-	24
			KANNADA KALI - I	AU	2	-	-	-	-
			KANNADA MANASU - I	AU	2	-	-	-	-

CR — Credit, AU — Audit, L — Lecture, T — Tutorial, P — Practical, S/P — Seminar/Project, C — No. of Credits

**BCom – 2021 -22 ONWARDS**

**III SEM BCom**

SL	PROG MC O DE	COURS ECODE	COURSE TITLE	CR / AU	SCHEME OF TEACHIN G					
					L	T	P	S/P	C	
1			FINANCIAL MANAGEMENT	CR	4		-	-	4	
2			INDIAN BANKING SYSTEM	CR	3		-	-	3	
3			GOODS AND SERVICES TAX	CR	3			-	4	
4			COSTING METHODS	CR	4			-	4	
5			SERVICES MARKETING	CR	3		-	-	3	
6			FOREX AND DERIVATIVES MARKET	CR	3		-	-	3	
7			CSR INTERSHIP VIVA	CR	-		-	-	4	2
					<b>23</b>		-	-	-	<b>23</b>
8			FRENCH – I	AU	2		-	-	-	-
			GERMAN – I							

CR — Credit, AU — Audit, L — Lecture, T — Tutorial, P — Practical, S/P —  
Seminar/Project, C – No. of Credits

**BCom – 2021 -22 ONWARDS****IV SEM BCom**

S L	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S/P	C
1			STOCK AND COMMODITY MARKET	CR	3	-	-	-	3
2			HUMAN RESOURCE MANAGEMENT	CR	4	-	-	-	4
3			MANAGEMENT ACCOUNTING	CR	4	-	-	-	4
4			AUDIT AND ASSURANCE	CR	4	-	-	-	4
5			FINANCIAL REPORTING	CR	4	-	-	-	4
6			STOCK MARKET TECHNICAL ANALYSIS	CR	2	-	-	-	2
7			GENERAL PSYCHOLOGY	CR	2				2
					2 2	-	-	-	22
8			FRENCH – II	AU	2	-	-	-	-
			GERMAN – II						

CR — Credit, AU — Audit, L — Lecture, T — Tutorial, P — Practical, S/P — Seminar/Project, C – No. of Credits

**BCom- 2021 -22 ONWARDS****V SEM B.Com**

<b>S L</b>	<b>PROGRAM CODE</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CR / AU</b>	<b>SCHEME OF TEACHING</b>				
					<b>L</b>	<b>T</b>	<b>P</b>	<b>S/P</b>	<b>C</b>
1			BUSINESS RESEARCH METHODS	CR	4	-	-	-	4
2			BUSINESS INFORMATION SYSTEM AND ANALYTICS	CR	4	-	-	-	4
3			STRATEGIC BUSINESS LEADER-I	CR	3	1	-	-	4
4			STRATEGIC BUSINESS REPORTING	CR	3	1	-	-	4
5			ADVANCED FINANCIAL MANAGEMENT	CR	3	1	-	-	4
					<b>17</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>20</b>

CR — Credit, AU — Audit, L — Lecture, T — Tutorial, P — Practical, S/P — Seminar/Project, C – No. of Credits

**BCom- 2021 -22 ONWARDS**

**VI SEM BCom**

S L	PROGR AM CODE	COURSE CODE	COURSE TITLE	CR /AU	SCHEME OF TEACHING				
					L	T	P	S/P	C
1			FINISHING SCHOOL	CR	1	-	-	-	1
2			PROJECT WORK & VIVA VOCE	CR	-	-	-	8	4
3			PAPER PRESENTATION	CR	1	-	-	-	1
4			STRATEGIC BUSINESS LEADER – II	CR	3	1	-	-	4
5			ADVANCED PERFORMANCE MANAGEMENT	CR	3	1	-	-	4
					<b>8</b>	<b>2</b>	<b>-</b>	<b>8</b>	<b>14</b>
6			LEARNING OF LATEST STATISTICAL TOOL – TABLEAU	AU	2	-	-	-	-
7			RESEARCH-RELATED STATISTICAL SOFTWARE PACKAGE	AU	2	-	-	-	-

CR — Credit, AU — Audit, L — Lecture, T — Tutorial, P — Practical, S/P —  
Seminar/Project, C – No. of Credits

**SCHEME –BBA– 2021 -22 ONWARDS****I SEMESTER**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / A U	SCHEME OF TEACHING				
					L	T	P	S /P	C
1			ACCOUNTING FOR MANAGERS	CR	3	1	-	-	4
2			ECONOMICS FOR BUSINESS	CR	3	-	-	-	3
3			PRINCIPLES OF MANAGEMENT	CR	4	-	-	-	4
4			ENGLISH	CR	2	-	-	-	2
5			ENVIRONMENTAL STUDIES	CR	2	-	-	-	2
6			MATHEMATICS FOR BUSINESS	CR	3	1	-	-	4
7			BUSINESS & CORPORATE ENVIRONMENT	CR	3	-	-	-	3
					<b>20</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>22</b>
8			CONSTITUTION OF INDIA AND HUMAN RIGHTS	AU	2	-	-	-	-
9			SKILL ENHANCEMENT	AU	2	-	-	-	-
CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits									

**SCHEME –BBA– 2021 -22 ONWARDS**

**II SEMESTER**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / A U	SCHEME OF TEACHING				
					L	T	P	S /P	C
1			QUANTITATIVE METHODS FOR BUSINESS	CR	3	1	-	-	4
2			ORGANIZATIONAL BEHAVIOUR	CR	4	-	-	-	4
3			MARKETING MANAGEMENT	CR	3	-	-	-	3
4			BUSINESS COMMUNICATION	CR	3	-	-	-	3
5			ADVERTISING & PUBLIC RELATIONS	CR	2	-	-	-	2
6			COST ACCOUNTING	CR	3	1	-	-	4
7			BUSINESS LAW	CR	4	-	-	-	4
					<b>20</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>22</b>
8			KANNADA KALI – I	AU	2	-	-	-	-
9			KANNADA MANASU – I	AU	2	-	-	-	-

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

### III SEMESTER

SL.	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S/P	C
1			STRATEGIC MANAGEMENT	CR	3	-	-	-	3
2			CORPORATE FINANCE	CR	3	1	-	-	4
3			CSR INTERNSHIP VIVA	CR	-	-	-	4	2
4			E-COMMERCE	CR	3	1	-	-	4
5			CORPORATE ACCOUNTING	CR	3	1	-	-	4
6			ADVANCED MS-OFFICE	CR	2	-	-	-	2
7			MANAGEMENT INFORMATION SYSTEM	CR	3	1	-	-	4
					<b>17</b>	<b>4</b>	<b>-</b>	<b>4</b>	<b>23</b>
8			FRENCH – I	AU	2	-	-	-	-
			GERMAN – I	AU	2	-	-	-	-

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits

### SCHEME–BBA–2021-22 ONWARDS

#### IV SEMESTER

SL.	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S/P	C
1			INDIAN FINANCIAL SYSTEM	CR	3	-	-	-	3
2			HUMAN RESOURCE MANAGEMENT	CR	4	-	-	-	4
3			GENERAL PSYCHOLOGY	CR	2	-	-	-	2
4			PRODUCTION AND OPERATIONS MANAGEMENT	CR	4	-	-	-	4
5			PROJECT MANAGEMENT	CR	4	-	-	-	4
6			BUSINESS ETHICS AND CORPORATE GOVERNANCE	CR	4	-	-	-	4
7			PERSONALITY DEVELOPMENT	CR	2	-	-	-	2
					<b>23</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23</b>
8			FRENCH – II	AU	2	-	-	-	-

GERMAN – II

AU

2

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CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C –  
No. of Credits

**SCHEME –BBA– 2021 -22 ONWARDS**

**V SEMESTER**

SL.	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / A U	SCHEME OF TEACHING				
					L	T	P	S/P	C
1			BUSINESS RESEARCH METHODS	CR	4	-	-	-	4
2			PROFESSIONAL ETIQUETTES AND COMMUNICATION	CR	3	-	-	-	3
3			CERTIFICATE COURSE	CR	2	-	-	-	2
4			ELECTIVE – I	CR	4	-	-	-	4
5			ELECTIVE – II	CR	4	-	-	-	4
					17	-	-	-	17

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C –  
No. of Credits

**LIST OF ELECTIVES–I**

SL.	SPECIALIZATION	XY	COURSE CODE (21XY351Z)	COURSE TITLE
1	FINANCE	FF		FINANCIAL MARKETS AND INTERMEDIARIES
2	HUMAN RESOURCE	HR		INDUSTRIAL RELATIONS AND LABOUR LAWS
3	MARKETING	MM		INTEGRATED MARKETING COMMUNICATION
4	BUSINESS ANALYTICS	BA		FUNDAMENTALS OF BUSINESS ANALYTICS
5	INTERNATIONAL BUSINESS	IB		GLOBAL BUSINESS ENVIRONMENT

**LIST OF ELECTIVES-II**

Sl	SPECIALIZATION	VV	COURSE CODE	COURSE TITLE
1	FINANCE	FF		SECURITIES ANALYSIS AND PORTFOLIO MANAGEMENT
2	HUMAN RESOURCE	HR		TRAINING AND DEVELOPMENT
3	MARKETING	MM		DIGITAL MARKETING
4	BUSINESS ANALYTICS	BA		INTRODUCTION TO ANALYTIC TOOL - R SOFTWARE
5	INTERNATIONAL BUSINESS	IB		INTERNATIONAL BUSINESS STRATEGY

**Scheme - BBA-2021-22 ONWARDS**

**VI SEM**

Sl	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S/P	C
1			FINISHING SCHOOL						
2			PROJECT WORK AND VIVA VOCE	CR	1	-	-	-	1
3			PAPER PRESENTATION	CR	-	-	-	8	4
4			ENTREPRENEURIAL DEVELOPMENT	CR	1	-	-	-	1
5			ELECTIVE - III	CR	3	-	-	-	3
6			ELECTIVE - IV	CR	4	-	-	-	4
				CR	4	-	-	-	4
					13	-	-	8	17
7			LEARNING OF LATEST STATISTICAL TOOL - TABLEAU	AU	2	-	-	-	-
8			RESEARCH-RELATED STATISTICAL SOFTWARE PACKAGE	AU	2	-	-	-	-

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No of Credits

**LIST OF ELECTIVES-III**

<b>SL.</b>	<b>SPECIALIZATION</b>	<b>XY</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>
1	FINANCE	FF		BUSINESS TAXATION
2	HUMAN RESOURCE	HR		INTERNATIONAL HRM
3	MARKETING	MM		RETAIL MANAGEMENT
4	BUSINESS ANALYTICS	BA		APPLICATION OF BUSINESS ANALYTICS - PYTHON
5	INTERNATIONAL BUSINESS	IB		INTERNATIONAL INSTITUTIONS A N D TRADE IMPLICATIONS

**LIST OF ELECTIVES-IV**

<b>SL.</b>	<b>SPECIALIZATION</b>	<b>XY</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>
1	FINANCE	FF		DIRECT TAXATION
2	HUMAN RESOURCE	HR		PERFORMANCE AND COMPENSATION MANAGEMENT
3	MARKETING	MM		SERVICES MARKETING
4	BUSINESS ANALYTICS	BA		BASICS OF ECONOMETRICS
5	INTERNATIONAL BUSINESS	IB		CROSS CULTURAL MANAGEMENT



# **DAYANANDA SAGAR UNIVERSITY**

## **SCHOOL OF COMMERCE AND MANAGEMENT**

### **Feedback Analysis and Action Taken Report**

**Date: 19-03-2021**

The Feedback Analysis Committee of the institution designs and collects feedback from its stakeholders to monitor and evaluate its performance quality on curriculum and curriculum related issues. The feedback was collected from various stakeholders like students, faculty, employers, and alumni.

The feedback targets following different content for different stakeholders.

- For students - Addressed curriculum and its learning related issues in terms of human values and ethics, quality, competence, skills and professionalism. This feedback also considers other issues infrastructure and faculty quality of teaching.
- For Faculty - the feedback addressed issues on the course and its importance on real life application, outcomes of the curriculum, course content and corresponding reference material, availability of reference materials in terms with curriculum, evaluation methods and curriculum delivery.
- For employers – Assessed issues on emerging national and global trends, design thinking aspects in relation to curriculum, working as a team player, creative challenges during difficult times, and integration of technology for work as learnt through the curriculum.
- For alumni – Assessed issues related to advanced and inter disciplinary topics, bridging the gap between industry and academics, sufficiency of syllabus content in context of current professional standards and curriculum design in context of development of self-directed learning and problem-solving approach.

**The feedback collected and to the respective authorities for the necessary actions:**

**From Students:**

Feedback	Action Taken
Overall, the student feedback was positive and reported that curriculum included major components that would add human values and ethics, employability and entrepreneurship skills and flexibility given in the curriculum.	No major action was taken based on the student feedback.

**From faculty:**

Feedback	Action Taken
To provide business immersion project and more frequent Field Visits	For the following comments the necessary action would be considered to have more frequent and relevant industrial visits and summer projects.
To start Short Term Programmes and certification program; and new programme	There is a standing proposal for approval of new courses such as – B. Com (Entrepreneurship) and B. Com General. In addition, certification program and short-term program would be floated in the upcoming academic calendar.

**From Employers:**

Feedback	Action Taken
Overall, the employer's feedback was positive and reported that students exhibited a great interest in learning new concepts and significant contribution to organisation objectives	-
Practical Training Session on different software and other statistical packages need to enhanced	Budget for extension of computer lab is approved. Where new computers and software would be installed
More of Financial Modelling with Practical Exposure to be enriched	Security and portfolio management, investment management and financial management courses will be taught using work sheet-based learning and excel
Focused majority on the Industry Academia Partnership for real time learning	We are in the process of association with industry and corporate houses. However, most of the students are undergoing internship in reputed organisation

**From Alumni:**

Feedback	Action Taken
Add the industry-oriented courses like Digital Marketing and Analytics	The feedback was considered and necessary action will be taken in the revision of the syllabus. Therefore – following courses like integrated marketing communication was modified.



**Dean**

**Annexure 1: Feedback Analysis of Student, faculty, Alumni and Employer**  
**2. samples of the Feedback collected**

Dear SCMS

I hope this message finds you well. I am writing to express my gratitude for the ongoing collaboration with Dayananda Sagar University and to provide feedback based on insights gathered during our engagement.

Employers and industry professionals have highlighted the importance of strong financial modelling skills among students entering the workforce. To further enrich the learning experience in this critical area, I would like to offer a suggestion for enhancing Financial Modelling with practical exposure.

we can ensure that students graduate with not only theoretical knowledge but also practical expertise in financial modelling, making them highly competitive in the job market.

I appreciate your consideration of these recommendations and look forward to witnessing the positive impact they can have on the School of Commerce and Management Studies.

Thank you for your commitment to excellence in education.



**Arnab Kumar Das**  
Human Resource

---

Feedback Letter

Date: 13-01-2021

Dear Dayananda Sagar University - School of Commerce and Management Studies,

I trust this message finds you well. I am reaching out to express my appreciation for the collaboration between our college and Dayananda Sagar University. As we strive for continuous improvement, I would like to offer feedback based on insights gathered during our engagement.

One recurrent suggestion from both employers and industry professionals emphasizes the need to enhance practical training sessions on different software and statistical packages. Recognizing the importance of this aspect, I would like to propose specific measures to enrich the practical training experience for students.

By incorporating these suggestions, we can collectively contribute to the comprehensive development of students, preparing them for the evolving demands of the professional landscape.

I appreciate your consideration of these recommendations and look forward to the positive impact they can have on the School of Commerce and Management Studies.

Thank you for your commitment to providing a robust educational experience.

Abhisht A. Pathak



Founders Office

Re: Board of Studies

1 message

Wed, Apr 14, 2021 at 7:34 PM

Dean Post Graduate Management Programs <dean-cee@dsu.edu.in>

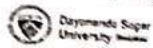
To: VV Rajan <vvrajan@dsu.edu.in>  
Cc: Shankar HN <hn.shankar@gmail.com>, Rahul Dighe <rdighe@dsu.edu.in>, "Dr. R. Venkatamuni Reddy" <rvmunireddy@gmail.com>, "A V Venkatesh Kumar, HR, BBAN" <venkatesh.kumar@buhlergroup.com>, Arindam Sen <arin\_sen@yahoo.com>, srinivas iyengar <Ars\_iyengar@live.com>, Anantharaman Subramanian1 <saraman123@in.ibm.com>, Srinivas RG <srinivas.rg@tibitsolutions.com>, spadmanabhuni@gmail.com, HOD MBA <hodmba@dsu.edu.in>, Utkarsh Thakur <uthakur@gmail.com>, ashish@oncofocus.com, Sunil Bhumralkar <sunil.bhumralkar@gmail.com>, gcasc@gmail.com, Registrar DSU <registrar@dsu.edu.in>

Dear Member - Bos:

Attached are the minutes of the meeting for our meeting held on Saturday, April 10, 2021. I have also included the program architecture for our Executive MBA program: *Business Analytics & Decision Science and courses for Product Management.*

Thanks & Warm Regards,

Prof. (CAPT) A. Nagaraj Subbarao  
Dean - Post Graduate Programs in Management  
Innovation Campus,  
Kudlu Gate, Hosur Main Road, Bangalore 560 068  
Tel # +91 80 48092931  
Mobile: +91 9986321964



[www.dsu.edu.in](http://www.dsu.edu.in)

Hope is not a strategy!

On Sat, Apr 10, 2021 at 9:12 AM VV Rajan <vvrajan@dsu.edu.in> wrote:

Dear Sir/ Madam

Just a gentle reminder.  
We will start our board of studies meeting by 10:30 AM today.

We look forward to seeing you.

Best Regards,

Prof VV Rajan

On Fri, 9 Apr, 2021, 14:40 VV Rajan, <vvrajan@dsu.edu.in> wrote:

Dear Sir/ Madam,

Just a gentle reminder regarding tomorrow's BoS meeting.  
Meeting time: 10:30AM to 12:30AM

Sharing the zoom links below as well:

<https://zoom.us/j/9060906040>

Personal Link: EMBAT4BA

Thanks and best regards,

Prof. VV Rajan  
Deputy Director - Executive Education  
Dayananda Sagar University

On Wed, Apr 7, 2021 at 3:50 PM VV Rajan <vvrajan@dsu.edu.in> wrote:

Dear Sir/ Madam,

Just a gentle reminder regarding our next Board of Studies Meeting.  
This is happening on 10th April between 10:30 AM to 12:30PM via Zoom.

A meeting invite has already been shared with you already.

Sharing the zoom links below as well:

<https://zoom.us/j/9060906040>

Personal Link: EMBAT4BA

We look forward to seeing you during the meeting.

Thanks and best regards,

Prof. VV Rajan  
Deputy Director - Executive Education  
Dayananda Sagar University  
Innovation Campus,  
Kudlu Gate, Hosur Main Road, Bangalore 560 068  
Mobile: +91 8884186036  
<http://www.dsu.edu.in>

Dean  
Centre for Executive Education  
Dayananda Sagar University



Thu, Apr 1, 2021 at 1:18 PM Dean Post Graduate Management Programs <dean-cee@dsu.edu.in> wrote:  
Dear Member- BoS:

I hope that you are doing well!

Attached is the framework for the new Executive MBA program - Business Analytics & Decision Science. The course syllabus has also been attached for your perusal and comments.

Please share your thoughts. We hope to meet on **Saturday, April 10, 2021, from 10:30 a.m. to 12:30 a.m. virtually**. Please make it convenient to attend. The zoom link will be shared shortly.

This program was put together by a team of subject matter experts and also taking into account similar programs while maintaining our distinctiveness. As you are aware, Dayananda Sagar University, Bengaluru has an extremely successful Executive MBA program. The ethos of this program is to assist managers in acquiring data, analyzing it and then making decisions to solve business problems. We hope to start with a batch size of 60 to 80. The eligibility criteria are mentioned.

Salient Points:

Courses: 15  
Cap-Stone Project: 1  
Audit Courses: 3

Thanks & Warm Regards,

Prof. (CAPT) A. Nagaraj Subbarao  
Dean - Post Graduate Programs in Management  
Innovation Campus,  
Kudlu Gate, Hosur Main Road, Bangalore 560 068  
Tel # +91 80 49092931  
Mobile: +91 9986321964



<http://www.dsu.edu.in>

Hope is not a strategy!

Attachments

- Bos Minutes Apr 10 2021.docx  
180K
- Product Management.zip  
282K
- bads\_coursesyllabus.zip  
2047K

Dean  
Centre for Executive Education  
Dayananda Sagar University



Registrar  
Dayananda Sagar University  
Bangalore



**MINUTES: BOARD OF STUDIES  
POST GRADUATE PROGRAMS IN MANAGEMENT  
(MBA/EMBA/ EXECUTIVE EDUCATION)**

**Prof Nagaraj Subbarao – Dean, SCMS (PGP)  
DAYANANDA SAGAR UNIVERSITY, BENGALURU**

**Registrar  
Dayananda Sagar University  
Bangalore**

**Dean  
Centre for Executive Education  
Dayananda Sagar University**

*Nagaraj*



# minutes



Dayananda Sagar  
University Bangalore

## Board of Studies: Post Graduate Management Programs (MBA/ EMBA)

Date April 10, 2021

10:30 Hours to 12:30 hours

Zoom

<https://zoom.us/j/9060906040>

Personal Link: EMBAT4BA

Meeting called by	Prof (CAPT) Nagara] Subbarao- Doan, Post Graduate Management Programs
Type of meeting	Academic/Regulatory: Virtual meeting on Zoom: <a href="https://zoom.us/j/9060906040">https://zoom.us/j/9060906040</a>
Notetaker	Prof. V.V. Rajan
Timekeeper	Prof. V.V. Rajan

### Attendees

#### Members: BoS

- 1 Prof. A. Nagara] Subbarao (Chairperson)
  - 2 Dr. Srinivas Padmanabhuni
  - 3 Prof. Venkatamuni Reddy
  - 4 Dr. Gervaslo SFL Mondes
  - 5 Prof.H.N. Shankar
  - 6 Srinivas RG
  - 7 Dr. Arindam Sen
  - 8 Prof. Srinivas Iyengar
  - 9 Prof.Sunil Bhumralkar
  - 10 Anantharaman Subramanian
  - 11 Prof. Rahul Dighe
  - 12 Prof. Geetha Reddy
- Did Not Attend (However gave Inputs through email)
1. A.V. Venkatesh
  2. Utkarsh Thakur
  3. Dr. Ashish Shukla

#### Invitees & Subject Matter Experts

1. Ananth Pophall (IT & Gen. Management)
2. Prof Ramesh Murthy (Supply Chain, Economics)
3. Dr. HN Shylaja (Financial Management)
4. Dr. Shweta Tewari (Marketing Management)
5. Dr. Radha Yadav (Human Resources)

Dean  
Centre for Executive Education  
Dayananda Sagar University



*Vegara]*

*Suttanadalli.*  
Registrar  
Dayananda Sagar University  
Bangalore

# minutes

## Agenda:

1. Opening Remarks by Hon'ble Vice-Chancellor: Dr. K. N. Balasubramanya Murthy is the Vice Chancellor of Dayananda Sagar University, Bengaluru. Introduction of Members- BoS
2. Context Setting & Road Map by the Dean: Prof. Nagaraj Subbarao
3. Discussion on the Executive MBA program on Business Analytics & Decision Science
4. Sharing a Specialization Certificate with students or naming the specialization on the degree certificate for MBA/Executive MBA
5. Creation of a new specialization in Executive MBA in Product Management and discussing if we can drop some specializations in the Executive MBA and MBA Programs
6. Any other items as raised by a member and/or chairperson

### Agenda point 1. Introduction & Welcome Address

10:30 to 10:50	Hon.Vice-Chancellor Dr.K.B.N. Murthy
Discussion	<p>Prof. Nagaraj Subbarao introduced the members.</p> <p>Hon. Vice-Chancellor Dr.K.B.N. Murthy welcomed the members of the Board of Studies and spoke about the need to chart a new course in management education and to make changes in enhancing pedagogy, curriculum, and student experience. He sought the active assistance of the Members of the BoS in this initiative.</p> <p>He said that most of us have experienced that we graduated from university as a different person - more mature, shaped, and inspired by new knowledge and friendships. The curriculum, pedagogy, and experience must create this eco-system for the student. The University puts great emphasis on innovation in teaching and learning, - entrepreneurship and societal impact of research.</p> <p>The Hon. Vice-Chancellor concluded by thanking members for their presence and interest in engaging with the Dayananda Sagar University.</p>
Conclusions	<p>The Hon. Vice-Chancellor stressed on the idea of using more case studies into the program, using more Indian case studies. Students must be encouraged to present and participate in groups. Look into white papers and research paper reviews. Make the final trimester as a project term and complete all the teaching portions until their 3<sup>rd</sup> trimesters'.</p>

### Agenda point 2. Context Setting & Road Map

Time allotted 10:50 to 11:00	Prof. Nagaraj Subbarao, Dean & Member - BoS
Discussion	<p>The Members - BoS present were introduced.</p> <p>Prof. Nagaraj Subbarao, followed up from where the Hon'ble Vice-Chancellor left-off and talked about the need to bring in fresh specializations' and also look at market conditions and industry need in offering new specializations.</p> <p>Prof. Nagaraj Rao spoke about the brilliant mix of faculty that the school possesses: Scholarly Professor and Practice Professors.</p> <p>Prof. Nagaraj Rao, presented a fact-sheet on student admissions to the MBA program from 2016 and the Executive MBA program from 2018.</p>



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## Agenda:

1. Opening Remarks by Hon'ble Vice-Chancellor: Dr. K. N. Balasubramanya Murthy is the Vice Chancellor of Dayananda Sagar University, Bengaluru. Introduction of Members- BoS
2. Context Setting & Road Map by the Dean: Prof. Nagaraj Subbarao
3. Discussion on the Executive MBA program on Business Analytics & Decision Science
4. Sharing a Specialization Certificate with students or naming the specialization on the degree certificate for MBA/Executive MBA
5. Creation of a new specialization in Executive MBA in Product Management and discussing if we can drop some specializations in the Executive MBA and MBA Programs
6. Any other items as raised by a member and/or chairperson

### Agenda point 1. Introduction & Welcome Address

10:30 to 10:50	Hon.Vice-Chancellor Dr.K.B.N. Murthy
Discussion	<p>Prof. Nagaraj Subbarao introduced the members.</p> <p>Hon. Vice-Chancellor Dr.K.B.N. Murthy welcomed the members of the Board of Studies and spoke about the need to chart a new course in management education and to make changes in enhancing pedagogy, curriculum, and student experience. He sought the active assistance of the Members of the BoS in this initiative.</p> <p>He said that most of us have experienced that we graduated from university as a different person - more mature, shaped, and inspired by new knowledge and friendships. The curriculum, pedagogy, and experience must create this eco-system for the student. The University puts great emphasis on innovation in teaching and learning, - entrepreneurship and societal impact of research.</p> <p>The Hon. Vice-Chancellor concluded by thanking members for their presence and interest in engaging with the Dayananda Sagar University.</p>
Conclusions	<p>The Hon. Vice-Chancellor stressed on the idea of using more case studies into the program, using more Indian case studies. Students must be encouraged to present and participate in groups. Look into white papers and research paper reviews. Make the final trimester as a project term and complete all the teaching portions until their 3<sup>rd</sup> trimesters'.</p>

### Agenda point 2. Context Setting & Road Map

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*Nagaraj*  
*Suttamudalla*



# minutes

	The curriculum of the MBA program was thoroughly revised in July/August 2020 and the Executive MBA program saw the inclusion of two new specializations' in:	
	<ol style="list-style-type: none"> <li>1. Information Technology Management</li> <li>2. Logistics &amp; Supply Chain Management</li> </ol>	
Conclusions	The quorum for the BoS was met and proposals agreed to.	
Action Items	Person Responsible	Deadline
Minutes to be circulated & completed, with all amendments	Nagaraj Subbarao	14-04-2021
Completed Minutes to be handed over the Registrar's Office with Associated Documents	Nagaraj Subbarao	15-04-2021

## Agenda point 3. Discussion on the Executive MBA program in Business Analytics & Decision Science

Time allotted 11:00 to 11:30	Prof. Nagaraj Subbarao, Dean & Member - BoS																
Discussion	<p>The discussion on introduction of a new program as an Executive MBA in Business Analytics &amp; Decision Science was taken up.</p> <p>The members perused the program architecture and course syllabus and agreed that it may be offered to working professionals from July 2021.</p> <p>It was envisaged that the program will be offered to working professionals with a strong mathematics and statistics background, which precludes people with a non-mathematics background from applying. A clarification was sought by Dr. Geetha Reddy, as to why this cannot be opened up to all educational specializations.</p> <p>At this point in time, it is decided to stay with the limited entry specializations. A decision will be taken after entry of two batches to broaden the scope of entry criterion:</p> <table border="1"> <thead> <tr> <th>Eligibility</th> <th></th> <th>Work Exp (Years)</th> </tr> </thead> <tbody> <tr> <td>B.E./B.Tech</td> <td></td> <td>2</td> </tr> <tr> <td>B.S.C (Math/Statistics/Physics)</td> <td></td> <td>2</td> </tr> <tr> <td>B. Com</td> <td>Not More than 10 % of Class</td> <td>4</td> </tr> <tr> <td>MTech/ M.S.C (Math/Statistics/Physics)</td> <td></td> <td>1</td> </tr> </tbody> </table>		Eligibility		Work Exp (Years)	B.E./B.Tech		2	B.S.C (Math/Statistics/Physics)		2	B. Com	Not More than 10 % of Class	4	MTech/ M.S.C (Math/Statistics/Physics)		1
Eligibility		Work Exp (Years)															
B.E./B.Tech		2															
B.S.C (Math/Statistics/Physics)		2															
B. Com	Not More than 10 % of Class	4															
MTech/ M.S.C (Math/Statistics/Physics)		1															

The members unanimously agreed that the program could be introduced as proposed.

### Notes

1. Dr. Geetha, recommended to keep the BADS program open for all students who show interest and not restrict to purely engineers etc. This can be done with a small test/ interview to gauge the students' interest in the program. Also, can we look into Cognitive Analytics as part of the Data Science course?
2. R.G. Srinivas recommended to swap Strategic Decision making in Management in semester 3 with Data warehousing and mining in semester 4. Other than that, it looks like a world class syllabus he said.
3. Dr. Padmanabhuni recommended that in data modeling course *NoSQL* has to be added. It is vital for businesses today he feels. NoSQL databases (aka "not only SQL")



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Dayananda Sagar University

# minutes



	are non-tabular, and store data differently than relational tables.
Conclusions	The quorum for the BoS was met and proposals agreed to in the creation of a fresh program as: <b>Executive MBA in Business Analytics &amp; Decision Science</b> as proposed.  Critically examine suggestions made by members.

**Agenda point 4. Sharing a Specialization Certificate with students or naming the specialization on the degree certificate for MBA/Executive MBA**

Time allotted 11:30 to 11:35	Prof. Nagaraj Subbarao, Dean & Member - BoS
Discussion	The incumbent degree certificates for the MBA / Executive MBA programs do not carry the functional specialization that a student has qualified in after going through stipulated courses. The proposal is to either have this incorporated in the degree certificate or to issue a separate 'specializations certificate' delineating the students specialization. It was felt that this was a legitimate issue and needs to be addressed.
Conclusions	The proposals were unanimously agreed to.

**Agenda point 5. Creation of a new specialization in Executive MBA in Product Management and discussing if we can drop some specializations in the Executive MBA and MBA Programs**

Time allotted 11:35 to 12:15	Prof. Nagaraj Subbarao, Dean & Member - BoS
Discussion	<p><b>Specializations in place: MBA</b></p> <ol style="list-style-type: none"> <li>1. Artificial Intelligence</li> <li>2. Business Analytics</li> <li>3. Entrepreneurship</li> <li>4. Financial Management</li> <li>5. Human Resource Management</li> <li>6. IT &amp; Enterprise Systems</li> <li>7. Marketing Management</li> <li>8. Supply Chain Management</li> </ol> <p><b>Specializations in place: Executive MBA</b></p> <ol style="list-style-type: none"> <li>1. Business Analytics</li> <li>2. Entrepreneurship &amp; Innovation</li> <li>3. Financial Management</li> <li>4. Global Business</li> <li>5. Human Resource Management</li> </ol>

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*Nagaraj Subbarao*  
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# minutes

6. Information Technology Management
7. Marketing Management
8. Logistics & Supply Chain Management
9. Operations Management
10. Project Management

Market research has indicated that a potentially attractive specialization is Product Management.

Approval was sought to introduce this specialization for the Executive MBA program from October 2021 and depending upon the response look to integrate it into the MBA program at a later date.

Approval was also sought to drop specializations in:

- Entrepreneurship & Innovation
- Global Business
- Operations Management

The members of the BoS felt that it was important to retain the following:

- Entrepreneurship & Innovation
- Operations Management

## Notes

1. Overall the members agreed to keep 10 specializations for the Executive MBA program and 08 specializations for the MBA program.
2. Entrepreneurship specialization to be retained as it is important for the program
3. Global Business to be removed and portions of this course to be well integrated into Marketing and HR specializations
4. All the members unanimously agreed to include product management in the program as an important specialization.
5. As per Dr. Padmanabhuni, it is important to look into common areas between Product management and IT management and ensure to keep them courses mutually exclusive of each other and avoid overlaps in the curriculum
6. Encourage more students to take up entrepreneurship and go beyond the course in terms of deliveries. Involve entrepreneurship students in other initiatives like DERBI etc. where they can learn and contribute towards overall understanding of the specialization.

## Conclusions

The quorum for the BoS was met and proposals agreed to. The Executive MBA program in Product Management to be included from October 2021 and the Executive MBA program in Global Business to be dropped from October 2021.

Look to include Product Management in the MBA program at a later date.

Action Items	Person Responsible	Deadline
Minutes to be created for Executive Education & completed, with all amendments	Nagaraj Subbarao	14-04-2021



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Dayananda Sagar University

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University Bangalore

Completed Minutes to be handed over the Registrar's Office with associated Documents

Nagaraj Subbarao

15-04-2021

Agenda point 6. Any other points as raised by the Chairperson or Members

Time allotted 12:15 to 12:30	Prof. Nagaraj Subbarao, Doan & Member - BoS/ Other Members
Discussion	The members were given an overview of the progress of the Post Graduate Programs in Management and their inputs sought.
Conclusions	Members expressed their satisfaction and Dr. Geetha, HOD - MBA/DSATM expressed her appreciation at the growth of the Executive MBA program. Other members were of a similar opinion. Prof. Nagaraj Subbarao thanked the members for attending the meeting and for their valuable inputs on behalf of the Hon'ble Vice-Chancellor, faculty and staff, Post Graduate Programs in Management, SCMS

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Dayananda Sagar University  
Bangalore



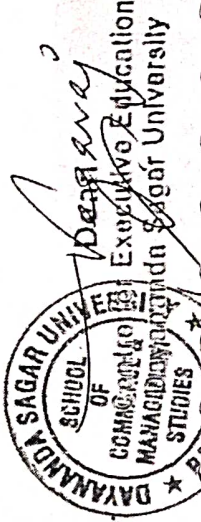
SCHEME - MBA - 2020-21 ONWARDS

SEMESTER - I

SIL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S/P	C
1	205	20MBA5101	ACCOUNTING FOR MANAGERS	CR	4	-	-	-	4
2	205	20MBA5102	MARKETING MANAGEMENT	CR	3	-	-	-	3
3	205	20MBA5103	HUMAN RESOURCE MANAGEMENT	CR	3	-	-	-	3
4	205	20MBA5104	ORGANIZATION BEHAVIOUR	CR	3	-	-	-	3
5	205	20MBA5105	INFORMATION SYSTEMS	CR	3	-	-	-	3
6	205	20MBA5106	STATISTICS FOR MANAGERS	CR	2	-	-	-	2
7	205	20MBA5107	BUSINESS ECONOMICS AND POLICY	CR	3	-	-	-	3
8	205	20MBA5108	BUSINESS COMMUNICATION - I	CR	2	-	-	-	2
9	205	20AU0036	CREATIVITY & INNOVATION	AU	2	-	-	-	-
10	205	20AU0037	EXCEL & POWERPOINT BASICS	AU	2	-	-	-	-
					23	-	-	-	23

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits,

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SCHEME - MBA - 2020-21 ONWARDS

SEMESTER - II

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					
					L	T	P	S/P	C	
1	205	20MBA5201	FINANCIAL MANAGEMENT	CR	4	-	-	-	-	4
2	205	20MBA5202	OPERATIONS MANAGEMENT	CR	4	-	-	-	-	4
3	205	20MBA5203	INTERNATIONAL BUSINESS	CR	3	-	-	-	-	3
4	205	20MBA5204	CORPORATE GOVERNANCE & BUSINESS LAW	CR	3	-	-	-	-	3
5	205	20MBA5205	ESSENTIALS OF ENTREPRENEURSHIP	CR	3	-	-	-	-	3
6	205	20MBA5206	BUSINESS COMMUNICATION - II	CR	2	-	-	-	-	2
7	205	20MBA5207	BUSINESS RESEARCH METHODS	CR	3	-	-	-	-	3
8	205	20MBA5208	INTRODUCTION TO BUSINESS ANALYTICS		4	-	-	-	-	4
					<b>26</b>	-	-	-	-	<b>26</b>
9	205	20AU0038	DESIGN THINKING	AU	2	-	-	-	-	-
10	205	20AU0039	LEADERSHIP & BUSINESS ETHICS	AU	2	-	-	-	-	-

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits,



**SCHEME - MBA - 2020-21 ONWARDS**

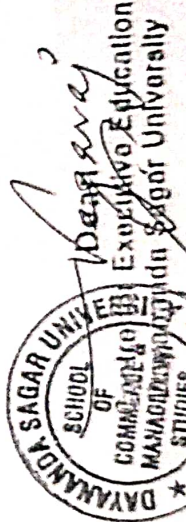
**SEMESTER - III**

SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR / AU	SCHEME OF TEACHING				
					L	T	P	S/P	C
1	205	20MBA6301	STRATEGIC MANAGEMENT	CR	3	-	-	-	3
2	205	20MBAXYYY	MAJOR SPECIALIZATION - ELECTIVE - 1	CR	4	-	-	-	4
3	205	20MBAXYYY	MAJOR SPECIALIZATION - ELECTIVE - 2	CR	4	-	-	-	4
4	205	20MBAXYYY	MAJOR SPECIALIZATION - ELECTIVE - 3	CR	4	-	-	-	4
5	205	20MBAXYYY	MAJOR SPECIALIZATION - ELECTIVE - 4	CR	4	-	-	-	4
6	205	20MBAXYYY	MINOR SPECIALIZATION - ELECTIVE - 1	CR	4	-	-	-	4
7	205	20MBAXYYY	MINOR SPECIALIZATION - ELECTIVE - 2	CR	4	-	-	-	4
8	205	20AU0040	CORPORATE GOVERNANCE AND ENTERPRISE RISK MANAGEMENT	AU	27	-	-	-	27
					2	-	-	-	-

CR – Credit, AU – Audit, L – Lecture, T – Tutorial, P – Practical, S/P – Seminar/Project, C – No. of Credits,

Note: X = F/H/M/I/S/E/B/R

SPECIALIZATION CODE (X)	SPECIALIZATION	SPECIALIZATION CODE (X)	SPECIALIZATION
F	FINANCE MANAGEMENT	S	SUPPLY CHAIN MANAGEMENT
H	HUMAN RESOURCE MANAGEMENT	E	ENTREPRENEURSHIP MANAGEMENT
M	MARKETING MANAGEMENT	B	BUSINESS ANALYTICS
I	IT & SYSTEMS MANAGEMENT	R	ARTIFICIAL INTELLIGENCE





**SCHEME - MBA - 2020-21 ONWARDS**

**SEMESTER - IV**

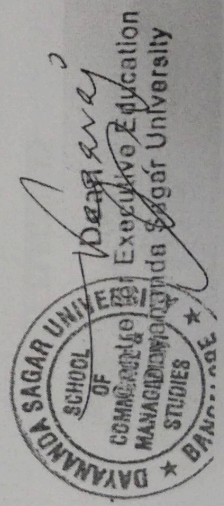
SL	PROGRAM CODE	COURSE CODE	COURSE TITLE	CR/AU	SCHEME OF TEACHING					
					L	T	P	S/P	C	
1	205	20MBAXYY	MAJOR SPECIALIZATION - ELECTIVE - 5	CR	4	-	-	-	4	
2	205	20MBAXYY	MINOR SPECIALIZATION - ELECTIVE - 3	CR	4	-	-	-	4	
3	205	20MBA6401	INTERNSHIP/FIELD WORK	CR	-	-	-	12	6	
4	205	20MBA6402	PROJECT WORK	CR	-	-	-	24	12	
					<b>08</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>36</b>	<b>26</b>

CR - Credit, AU - Audit, L - Lecture, T - Tutorial, P - Practical, S/P - Seminar/Project, C - No. of Credits,

Note: X = F/H/M/I/S/E/B

SPECIALIZATION CODE (X)	SPECIALIZATION	SPECIALIZATION CODE (X)	SPECIALIZATION
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H	HUMAN RESOURCE MANAGEMENT	E	ENTREPRENEURSHIP MANAGEMENT
M	MARKETING MANAGEMENT	B	BUSINESS ANALYTICS
I	IT & SYSTEMS MANAGEMENT	R	ARTIFICIAL INTELLIGENCE

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SCHEME - MBA - 2020-21 ONWARDS

SEMESTER - IV

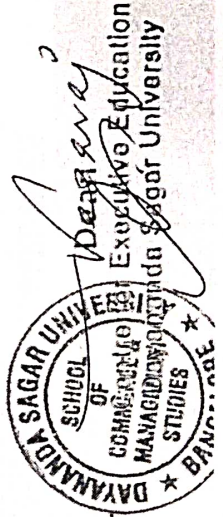
PROGRAM CODE	COURSE CODE	COURSE TITLE	CR /AU	SCHEME OF TEACHING				
				L	T	P	S/P	C
205	20MBAXYY	MAJOR SPECIALIZATION - ELECTIVE - 5	CR	4	-	-	-	4
205	20MBAXYY	MINOR SPECIALIZATION - ELECTIVE - 3	CR	4	-	-	-	4
205	20MBA6401	INTERNSHIP/FIELD WORK	CR	-	-	-	12	6
205	20MBA6402	PROJECT WORK	CR	-	-	-	24	12
				<b>08</b>	-	-	<b>36</b>	<b>26</b>

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Note: X = F/H/M/I/S/E/B

SPECIALIZATION CODE (X)	SPECIALIZATION	SPECIALIZATION CODE (X)	SPECIALIZATION
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H	HUMAN RESOURCE MANAGEMENT	E	ENTREPRENEURSHIP MANAGEMENT
M	MARKETING MANAGEMENT	B	BUSINESS ANALYTICS
I	IT & SYSTEMS MANAGEMENT	R	ARTIFICIAL INTELLIGENCE

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**LIST OF ELECTIVES**

**SPECIALIZATION : FINANCE MANAGEMENT - F**

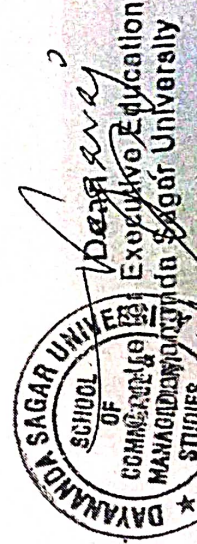
SL.NO	COURSE CODE	COURSE TITLE
1	20MBAF001	COMMERCIAL BANKING
2	20MBAF002	MERGERS, ACQUISITIONS AND RESTRUCTURING
3	20MBAF003	SECURITY ANALYSIS & PORTFOLIO MANAGEMENT
4	20MBAF004	FINANCIAL DERIVATIVES
5	20MBAF005	INTERNATIONAL FINANCIAL MANAGEMENT

**SPECIALIZATION : HUMAN RESOURCE MANAGEMENT - H**

SL.NO	COURSE CODE	COURSE TITLE
1	20MBAH001	EMPLOYEE RELATIONS AND LABOUR LAW
2	20MBAH002	PERFORMANCE MANAGEMENT & COMPENSATION MANAGEMENT
3	20MBAH003	HIRING & PSYCHOMETRIC ASSESSMENT
4	20MBAH004	STRATEGIC HR & CHANGE MANAGEMENT
5	20MBAH005	INTERNATIONAL HRM AND CROSS CULTURAL MANAGEMENT

**SPECIALIZATION : MARKETING MANAGEMENT - M**

SL.NO	COURSE CODE	COURSE TITLE
1	20MBAM001	MODERN MARKETING MANAGEMENT (RETAIL, B2B, SERVICES, CBMR)
2	20MBAM002	RURAL MARKETING MANAGEMENT
3	20MBAM003	DIGITAL MARKETING
4	20MBAM004	ADVERTISING AND INTEGRATED MARKETING COMMUNICATIONS (ADVERTISING, BRAND, PRODUCT AND MEDIA MANAGEMENT)
5	20MBAM005	GLOBAL MARKETING AND DISTRIBUTION MGMT (SALES, DISTRIBUTION, INTL MKTG)





**SPECIALIZATION : IT & SYSTEMS MANAGEMENT - I**

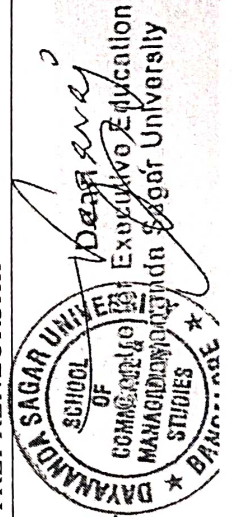
SL.NO	COURSE CODE	COURSE TITLE
1	20MBAI001 ✓	ENTERPRISE IT SYSTEMS AND APPLICATIONS I: (ERP, CRM, ETL, BI)
2	20MBAI002 ✓	ENTERPRISE IT SYSTEMS AND APPLICATIONS II: (HR AND PAYROLL, FINANCE, ACCOUNTING, SERVICE AND TICKETING MANAGEMENT SYSTEMS)
3	20MBAI003 ✓	PROGRAM AND PROJECT MANAGEMENT, CUSTOMER SERVICE MANAGEMENT
4	20MBAI004 ✓	STARTUP AND PRODUCT DEVELOPMENT: (INNOVATION, IDEATION, PRODUCT MANAGEMENT, INTELLECTUAL PROPERTY AND BUSINESS DEVELOPMENT)
5	20MBAI005	FUNDAMENTALS OF AI/ MACHINE LEARNING & RPA

**SPECIALIZATION : SUPPLY CHAIN MANAGEMENT - S**

SL.NO	COURSE CODE	COURSE TITLE
1	20MBAS001	SUPPLY PLANNING AND MANAGEMENT: (S&OP, MASTER PLANNING)
2	20MBAS002	INVENTORY & WAREHOUSE MANAGEMENT:
3	20MBAS003	FACTORY PLANNING, SCHEDULING & TRANSPORTATION PLANNING
4	20MBAS004	DEMAND MANAGEMENT (DEMAND PLANNING & FORECASTING) & PROCUREMENT
5	20MBAS005	SCM FOR BUSINESS IMPACT: SUPPLY CHAIN METRICS, SUPPLY CHAIN ANALYTICS AND PERFORMANCE MANAGEMENT

**SPECIALIZATION : ENTREPRENEURSHIP MANAGEMENT - E**

SL.NO	COURSE CODE	COURSE TITLE
1	20MBAE001	ENTREPRENEURSHIP & INNOVATION
2	20MBAE002	BUSINESS PLAN DEVELOPMENT
3	20MBAE003	ENTREPRENEURIAL FINANCE
4	20MBAE004	NEW VENTURE CREATION
5	20MBAE005	SOCIAL ENTREPRENEURSHIP





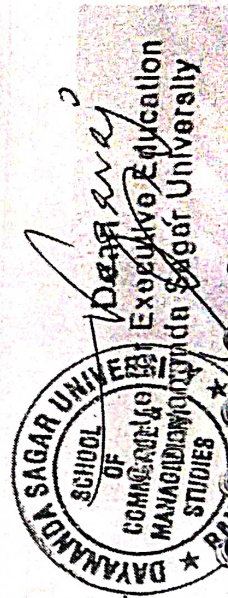
**SPECIALIZATION: BUSINESS ANALYTICS - B**

SL.NO	COURSE CODE	COURSE TITLE
1	20MBAB001	DATA WAREHOUSING, DATA COLLECTION AND BIG DATA
2	20MBAB002	OVERVIEW OF BUSINESS ANALYTICS FOR DECISION MAKING
3	20MBAB003	DATA VISUALIZATION FOR DECISION MAKING
4	20MBAB004	PREDICTIVE ANALYTICS USING R
5	20MBAB005	EDA USING PYTHON

**SPECIALIZATION: ARTIFICIAL INTELLIGENCE - R**

SL.NO	COURSE CODE	COURSE TITLE
1	20MBAR001	DATA SCIENCE FUNDAMENTALS
2	20MBAR002	AI BASICS : MACHINE LEARNING, DEEP LEARNING, NLP, RI
3	20MBAR003	PYTHON PROGRAMMING & PYTORCH
4	20MBAR004	MANAGING AI PROJECTS & TRENDS IN AI
5	20MBAR005	INDUSTRY APPLICATIONS OF AI : BFSI , HEALTH CARE , EDUCATION , MANUFACTURING , SCM , RETAIL , PHARMA

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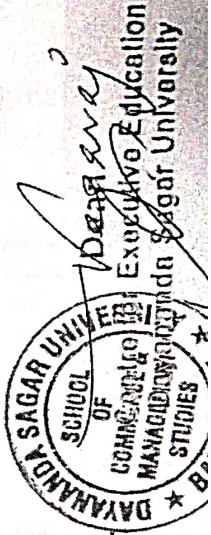
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MANAGEMENT STUDIES  
DAYANANDA SAGAR UNIVERSITY  
EXCELLENCE IN EDUCATION



**PREREQUISITES MATRIX TO SELECT MAJOR & MINOR SPECIALIZATIONS**

SL	SPECIALIZATION	SEM	COURSE CODE	COURSE TITLE
1	FINANCE MANAGEMENT	I	20MBA5101	ACCOUNTING FOR MANAGERS
		II	20MBA5201	FINANCIAL MANAGEMENT
2	HUMAN RESOURCE MANAGEMENT	I	20MBA5103	HUMAN RESOURCE MANAGEMENT
		I	20MBA5104	ORGANIZATION BEHAVIOUR
3	MARKETING MANAGEMENT	I	20MBA5102	MARKETING MANAGEMENT
4	IT & SYSTEMS MANAGEMENT	I	20MBA5105	INFORMATION SYSTEMS
		II	20MBA5207	BUSINESS RESEARCH METHODS
5	SUPPLY CHAIN MANAGEMENT	II	20MBA5208	INTRODUCTION TO BUSINESS ANALYTICS
		I	20MBA5106	STATISTICS FOR MANAGERS
6	ENTREPRENEURSHIP MANAGEMENT	II	20MBA5202	OPERATIONS MANAGEMENT
		II	20MBA5207	BUSINESS RESEARCH METHODS
7	BUSINESS ANALYTICS	II	20MBA5205	ESSENTIALS OF ENTREPRENEURSHIP
		I	20MBA5106	STATISTICS FOR MANAGERS
8	ARTIFICIAL INTELLIGENCE	II	20MBA5207	BUSINESS RESEARCH METHODS
		II	20MBA5208	INTRODUCTION TO BUSINESS ANALYTICS
		I	20MBA5105	INFORMATION SYSTEMS
		I	20MBA5106	STATISTICS FOR MANAGERS
		II	20MBA5207	BUSINESS RESEARCH METHODS
		II	20MBA5208	INTRODUCTION TO BUSINESS ANALYTICS

*S. Hanumanth*





VV Rajan <vvrajan@dsu.edu.in>

**BoS**

1 message

Dean Post Graduate Management Programs <dean-  
cee@dsu.edu.in>

Tue, Mar 23, 2021 at 11:29 AM

To: Registrar DSU <registrar@dsu.edu.in>  
Cc: VV Rajan <vvrajan@dsu.edu.in>, Aravind NV <aravind.nv@dsu.edu.in>, Arunjyothi B N <arunjyothi@dsu.edu.in>, "Mr.Raghavendra Rao" <raghav@dsu.edu.in>

Dear Sir,

Attached is the reconstituted Board of Studies, Post Graduate Programs in Management, School of Commerce & Management Studies, Dayananda Sagar University, Bengaluru with effect from March 24, 2021.

Kindly arrange to process, please.

Thanks & Warm Regards,

Prof. (CAPT) A. Nagaraj Subbarao  
Dean - Post Graduate Programs in Management  
Innovation Campus,  
Kudlu Gate, Hosur Main Road, Bangalore 560 068  
Tel # +91 80 49092931  
Mobile: +91 9986321964



<http://www.dsu.edu.in>

Hope is not a strategy!



BoS PG Programs SCMS March 24, 2021.xlsx  
13K

Dean  
Centre for Executive Education  
Dayananda Sagar University



Registrar  
Dayananda Sagar University  
Bangalore

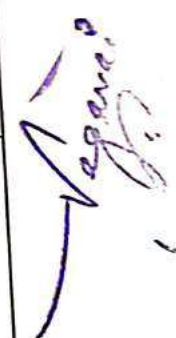

**Board of Studies ( Post Graduate Programs in Management) March 24, 2021**

**Contact Details**


**Education/Experience**

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#	Member	Designation/Industry	Education/Experience
1	CAPT. A. Nagaraj Subbarao ( Chairperson ) A.V. Venkatesh	Professor & Dean - PG Programs SCMS, DSU Director - IIR/ Buhler India	IIM-B, Bangalore SV University, Tirupati
2	Dr.R.V. Reddy	Professor (MAHE), Manipal, Karnataka	Mysore University
3	Dr. Geetha Reddy	Professor & HoD, MBA Program - DSATM, DSI	IISC, Bangalore; Cornell University, USA
4	Anantharaman Subramanian	Director, Future Skills, IBM Global Business Services	35
5	Utkarsh Thakur	Head - E-commerce, Watches & Wearables at Titan Company Limited	MICA, Ahmedabad
6	Srinivas RG	Chief Revenue Officer (CRO) at TIBIL Solutions	BITS-Pilani; University of New South Wales, Australia
7	Dr. Ashish Shukla	Founder and MD Oncofocus Solutions	Deutsches Krebsforschungszentrum (German Cancer Research Center)
8	Dr.Srinivas Padmanabhuni	CityMandy - Founder & CTO Director at IICL Technologies	15 IIT-B, Mumbai; University of Alberta, USA
9	Dr. Arindam Sen	Vice President at Tieto EVRY, Finland	25 Asian Institute of Management, Philippines
10	Sunil Bhumraikar	Consultant Former Managing Partner E&Y Professor - SCMS	30 CA 20 CA 40
11	Dr. Rahul Dighe	Add. Director ( IIE ), Directorate of IIE, Govt of Goa Professor & Principal, GASC, Sanquelin, Goa	25 IIT-B, Mumbai; MIT- USA
12	Dr. Gervasio SFL Mendes	Former CEO - DDE-ORG SAGAR CONSULTING SCHOOL OF BUSINESS MANAGEMENT STUDIES BANGALORE	30 BA, MA, PGDM, PHD ( Uthal University)
13	H.N. Shankar		30 IIE, MIA - Mysore University
14			49

**Board of Studies - PG Program**  
**Centre for Executive Education**  
**Dayananda Sagar University**

  
 Suttamodali



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Fax: +91-80-42201997  
Web : www.dsu.edu.in

Ref: DSU/REG/2020-21/176(A)

Date :23.03.2021

**NOTIFICATION**

**Sub:** Constitution of Board of Studies for the Post Graduate Programs in Management - School of Commerce and Management Studies - Dayananda Sagar University, Bengaluru.

The Vice Chancellor is pleased to Constitution the Board of Studies of the Post Graduate Programs in Management under School of Commerce & Management studies of Dayananda Sagar University, Bengaluru comprising of following:

Sl.No	Name	Affiliation	Designation
1	CAPT.A.Nagaraj Subbarao	Professor & Dean -PG Programs - SCMS,DSU	Chairman
2	Mr. A V Venkatesh	Director - HR, Buhler India	Member
3	Dr. R V Reddy	Professor - MAHE, Manipal	Member
4	Dr. Geetha Reddy	Professor &HOD, MBA Program, DSATM, DSI	Member
5	Mr. Anantharaman Subramanian	Director , Future Skills, IBM Global Business Services	Member
6	Mr. Utkarsh Thakur	Dean- E Commerce, Watches & Wearables at Titan Company Limited	Member
7	Mr. Srinivas R G	Chief Revenue Officer (CRO) at TIBIL Solutions	Member
8	Dr. Ashish Shukla	Founder and MD Oncofocus Solutions	Member
9	Dr.Srinivas Padmanabhuni	City Mandy - Founder & CTO	Member
10	Dr. Arindam Sen	Director at HCL Technologies	Member
11	Mr. Srinivas Iyengar	Vice President at Tieto EVRY, Finland	Member

Dean  
Centre for Executive Education  
Dayananda Sagar University


*(Signature)*  
*(Signature)*



12	Mr. Sunil Blumarikar	Consultant, Former Managing Partner E&Y,	Member
13	Dr. Rahul Dighe	Professor -SCMS	Member
14	Dr. Gervasio SFL., Mendes	Add. Director (HE), Directorate of HE, Govt of Goa, Professor & Principal, GASC, Sanquelin, Goa	Member
15	Mr. H.N Shankar	Consultant & Former CEO, DDE:OG, Denmark	Member

The term of Board shall be Two years from the date of notifications or till reconstitution. The Board shall follow the guidelines stipulated by the University, from time to time, in all academic issues to be decided by it.

To,  
The Concerned

  
Registrar  
22/3/21  
Dr. Puttamadappa C.1  
Registrar  
Dayananda Sagar University  
Bangalore

CC: PS to VC / CFO / CIO / COE / The concerned Dean/Principal, DSU

Dean  
Centre for Executive Education  
Dayananda Sagar University





  
Registrar  
Dayananda Sagar University  
Bangalore