DAYANANDA SAGAR UNIVERSITY

Shavige Malleshwara Hills, Kumaraswamy Layout,

Bengaluru - 560078, Karnataka.

SCHOOL OF ENGINEERING

SCHEME & SYLLABUS
FOR
MASTER OF TECHNOLOGY (M.Tech) – 2016
COMPUTER SCIENCE & ENGINEERING

SPECIALIZATION: COMPUTER SCIENCE AND ENGINEERING (BIG DATA/IOT)

(With Effect from 2016-17)

DAYANANDA SAGAR UNIVERSITY

SCHEME OF TEACHING AND EXAMINATION 2016 – 2017

SEMESTER I BRANCH: M Tech Computer Science & Engineering

(Specialization in a)Big Data, and b) IoT)

SL. NO	COURSE CODE	COURSE TITLE	$\frac{C}{AU}$	NO. OF HOURS OF TEACHING				SCHEME OF EVALUATION	
								CONTINUOUS	EXAMINATION
				L	T	P	C		SEMESTER END EXAM
1	16CSE501	ADVANCED ALGORITHMS	CR	03	02	--	04	40	60
2	16CSE502	ADVANCED OPERATING SYSTEM	CR	03	-	-	03	40	60
3	16CSE503	ADVANCED DBMS	CR	03	-	--	03	40	60
4	16CSEXXX	DEPARTMENT ELECTIVE -1	CR	03	--	02	04	40	60
5	16CSEXXX	DEPARTMENT ELECTIVE-2	CR	03	--	02	04	40	60
6	16CSE571	ADVANCED OS LAB	CR	--	--	04	02	40	60
7	16CSE572	ADVANCED DBMS LAB	CR	--	--	04	02	40	80
Grand Total 700				**15**	**02**	**12**	**22**	**280**	**420**

Continuous evaluation: 1. 2 IA Tests(20), 2. Assignment or mini project (10 marks), 3. Any two of Self-study presentation, survey reports, quiz, Laboratory exercises, presentation in seminar & work shops (10 marks)

DAYANANDA SAGAR UNIVERSITY

SCHEME OF TEACHING AND EXAMINATION 2016 – 2017

SEMESTER II BRANCH: M Tech Computer Science & Engineering (Specialization in (a) Big Data, and (b) IoT)

SL. NO	COURSE CODE	COURSE TITLE	CR / AU	NO. OF HOURS OF TEACHING				SCHEME OF EVALUATION	
				L	T	P	C	CONTINUOUS	EXAMINATION END EXAM
1	16CSE504	HIGH PERFORMANCE COMPUTING	CR	03	--	--	03	40	60
2	16CSE505	ADVANCED COMPUTER NETWORKS	CR	03	--	--	03	40	60
3	16CSE506	FORMAL METHODS IN SOFTWARE ENGINEERING	CR	03	02	--	04	40	60
4	16CSE5XX	DEPARTMENT ELECTIVE -1	CR	03	--	02	04	40	60
5	16CSE 5XX	DEPARTMENT ELECTIVE -2	CR	03	--	02	04	40	60
6	16CSE573	HPC LAB	CR	--	--	04	02	40	60
7	16CSE574	COMPUTER NETWORKS LAB	CR	--	--	04	02	40	60
GRAND TOTAL 700				**15**	**02**	**14**	**22**	**280**	**420**

Continuous evaluation: 1. 2 IA Tests (20), 2. Assignment or mini project (10 marks), 3. Any two of Self-study presentation, survey reports, quiz, Laboratory exercises, presentation in seminar & workshops (10 marks)

DAYANANDA SAGAR UNIVERSITY

SCHEME OF TEACHING AND EXAMINATION 2016 – 2017

SEMESTER III BRANCH: M Tech COMPUTER SCIENCE & ENGINEERING

(SPECIALIZATION IN A)BIG DATA, AND b) IoT)

SL. NO	COURSE CODE	COURSE	$\frac{CR}{AU}$	NO. OF HOURS OF TEACHING				SCHEME OF EVALUATION	
								CONTINUOUS	END SEMESTER
				L	T	P	C		SEMESTER END EXAM
1	16CSEXXX	DEPARTMENT ELECTIVE	CR	03	--	02	04	40	60
2	16IEE6XX	INSTITUTIONAL ELECTIVE	CR	03	--	--	03	40	60
3	16CSE681	DISSERTATION	CR	--	--	--	03	100	--
GRAND TOTAL 300				**06**	**--**	**--**	**10**	**180**	**120**

SEMESTER IV BRANCH: M Tech COMPUTER SCIENCE & ENGINEERING

(SPECIALIZATION IN A)Big Data, and b) IoT)

SL. NO.	COURSE CODE	COURSE	$\frac{CR}{AU}$	NO. OF HOURS OF TEACHING				SCHEME OF EVALUATION	
								CONTINUOUS	END SEMESTER
				L	T	P	C		SEMESTER END EXAM
1	16CSEXXX	DEPARTMENT ELECTIVE	CR	03	--	02	04	40	60
3	16CSE682	DISSERTATION	CR	--	--	--	06	200	100
GRAND TOTAL 400				**03**	**00**	**02**	**10**	**240**	**160**
GRAND TOTAL 2000 TOTAL CREDITS 64									

Continuous evaluation: 1. 2 IA Tests (20), 2. Assignment or mini project (10 marks), 3. Any two of Self-study presentation, survey reports, quiz, Laboratory exercises, presentation in seminar & workshops (10 marks)

DEPARTMENTAL ELECTIVES FOR BIG DATA STREAM

DEPARTMENTAL ELECTIVE		DEPARTMENTAL ELECTIVE	
16CSE521	DISTRIBUTED COMPUTING	16CSE537	DATA ANALYTICS & VISUALIZATION
16CSE522	LINUX KERNEL PROGRAMMING	16CSE543	MODELING & SIMULATION
16CSE523	MULTI-CORE ARCHITECTURES		
16CSE524	DATA SCIENCE	16CSE 622	MEDICAL IMAGE PROCESSING
16CSE525	WEB TECHNOLOGIES	16CSE 623	AGILE SOFTWARE DEVELOPMENT
16CSE526	IMAGE PROCESSING	16CSE 624	BUSINESS INTELLIGENCE TECHNOLOGY
16CSE528	INFORMATION RETRIEVAL TECHNIQUES	16CSE 626	NATURAL LANGUAGE PROCESSING
16CSE 529	DATA MINING	16CSE628	PRODUCT DEVELOPMENT & MANAGEMENT
16CSE 530	MOBILE COMPUTING	16CSE629	SOFTWARE PROJECT MANAGEMENT
16CSE 531	STORAGE SYSTEMS	16CSE631	MACHINE LEARNING
16CSE 532	PROBABILITY & STATISTICS FOR ANALYTICS	16CSE639	COMPUTER VISION
16CSE 533	VIRTUALIZATION & CLOUD COMPUTING		
16CSE 534	PARALLEL PROGRAMMING		
16CSE 535	ONLINE COMPUTATION & COMPETITIVE ANALYSIS		

DEPARTMENTAL ELECTIVES FOR IOT STREAM

DEPARTMENTAL ELECTIVE		DEPARTMENTAL ELECTIVE	
16CSE521	DISTRIBUTED COMPUTING	16CSE 535	ONLINE COMPUTATION & COMPETITIVE ANALYSIS
16CSE522	LINUX KERNEL PROGRAMMING	16CSE537	DATA ANALYTICS & VISUALIZATION
16CSE523	MULTI-CORE ARCHITECTURES	16CSE538	SOFTWARE APPLICATIONS FOR ENERGY DOMAIN
16CSE524	DATA SCIENCE	16CSE542	WEARABLE DEVICE TECHNOLOGIES
16CSE525	WEB TECHNOLOGIES	16CSE543	MODELING & SIMULATION
16CSE527	WIRELESS SENSOR NETWORKS	16CSE544	INTERNET OF THINGS
16CSE 529	DATA MINING	16CSE 623	AGILE SOFTWARE DEVELOPMENT
16CSE 536	REAL TIME SYSTEMS		
16CSE 530	MOBILE COMPUTING	16CSE627	SOFTWARE APPLICATIONS FOR SMART CITIES & BUILDING
16CSE 533	VIRTUALIZATION & CLOUD COMPUTING	16CSE628	PRODUCT DEVELOPMENT & MANAGEMENT
16CSE 534	PARALLEL PROGRAMMING	16CSE630	SOFTWARE APPLICATIONS FOR SMART VEHICLES

INSTITUTIONAL ELECTIVES

COURSE CODE	COURSE TITLE	OFFERING DEPARTMENT
16IEE651	DIGITAL MARKETING	COMPUTER SCIENCE & ENGINEERING
16IEE652	PRODUCT LIFE CYCLE MANAGEMENT	MECHANICAL ENGINEERING
16IEE653	PROJECT MANAGEMENT	ELECTRONICS & COMMUNICATION ENGINEERING