

SDM College of Engineering and Technology, Dharwad – 580002

Department of Computer Science and Engineering

2021 Scheme

I/II semester B. E. (Common to all Branches)

Physics cycle

Course Code	*Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	**Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UMAC100	BS	Engineering Mathematics-I	2 - 2 - 0	3	50	100	3	-	-
21UPHC100	BS	Engineering Physics	3 - 0 - 0	3	50	100	3	-	-
21UEEC100	ES	Basic Electrical Engineering	3 - 0 - 0	3	50	100	3	-	-
21UCVC100	ES	Elements of Civil Engineering and Mechanics	3 - 0 - 0	3	50	100	3	-	-
21UMEC100	ES	Elements of Mechanical Engineering	2 - 0 - 0	2	50	50	2	-	-
21UHUC100	HU	Functional English	1 - 2 - 0	2	50	50	2	-	-
21UPHL100	BS	Engineering Physics Lab	0 - 0 - 2	1	50	-	-	50	2
21UESL100	ES	Basic Engineering Skills Lab	0 - 0 - 2	1	50	-	-	50	2
21UAEE1XX	AE	Ability Enhancement Course	2- 0- 0	2	50	50	2	-	-
Total			16 – 4 - 4	20	450	550		100	

Chemistry cycle

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UMAC100	BS	Engineering Mathematics – I	2-2-0	3	50	100	3	-	-
21UCYC100	BS	Engineering Chemistry	3-0-0	3	50	100	3	-	-
21UECC100	ES	Basic Electronics	3-0-0	3	50	100	3	-	-
21UCSC100	ES	Problem Solving & Programming in C	3-0-0	3	50	100	3	-	-
21UMGC100	ES	Engineering Graphics	2-0-0	2	50	50	2	-	-
21UCYL100	BS	Engineering Chemistry Lab	0-0-2	1	50	-	-	50	2
21UCSL100	ES	Computer Programming Lab	0-0-2	1	50	-	-	50	2
21UAEE1XX	AE	Ability Enhancement Course	2-0-0	2	50	50	2	-	-
21UHUC101	HU	Society, Environment and Engineering	2-0-0	2	50	50	2	-	-
Total			17 - 2 - 4	20	450	550		100	

Elective Course:

Course Code	Course Title	Credits
21UAEE100	Biology for Engineers	2
21UAEE201	Numerical Techniques for Engineers	2
21UAEE200	Cyber Law	2

III Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UCSM300	BS	Engg.Mathematics-III	3-0-0	3	50	100	3	-	-
21UCSC300	PC	Digital Electronics	3-0-0	3	50	100	3	-	-
21UCSC301	PC	Data Structures and Applications	3-0-0	3	50	100	3	-	-
21UCSC302	PC	Computer Organization and Architecture	3-0-0	3	50	100	3	-	-
21UCSC303	PC	Operating Systems	3-0-0	3	50	100	3	-	-
21UAEE324	AE	Unix Administration and Programming	2-0-0	2	50	50	2	-	-
21UHUC300	HU	Universal Human Values - I	2-0-0	2	50	50	2	-	-
21UCSL304	PC	Digital Electronics Laboratory	0-0-3	1.5	50	-	-	50	3
21UCSL305	PC	Data Structures and Applications Laboratory	0-0-3	1.5	50	-	-	50	3
21UHUC301	HU	Kannada	2-0-0	1	50	50	2	-	-
21UMBA301	BS	Mathematics	3-0-0	Audit	50	-	-	-	-
Total			24-0-6	23	550	650	-	100	-

IV Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UCSM400	BS	Engineering Mathematics-IV	3-0-0	3	50	100	3	-	-
21UCSC400	PC	Programming Computer Peripherals and Interfacing	3-0-0	3	50	100	3	-	-
21UCSC401	PC	Object Oriented Programming	3-0-0	3	50	100	3	-	-
21UCSC402	PC	Analysis and Design of Algorithms	3-0-0	3	50	100	3	-	-
21UCSC403	PC	Software Engineering	3-0-0	3	50	100	3	-	-
21UHUA400	HU	The Constitution of India and Professional Ethics.	2-0-0	Audit	50	-	-	-	-
21UHUC402	HU	Universal Human Values – II	2-0-0	2	50	50	2	-	-
21UCSL405	PC	Object Oriented Programming Lab	0-0-3	1.5	50	-	-	50	3
21UCSL406	PC	Programming Computer Peripherals and Interfacing Lab	0-0-3	1.5	50	-	-	50	3
21UCSL407	PC	Introductory Project	0-0-2	1	50	-	-	-	-
21UMBA401	BS	Mathematics	3-0-0	Audit	50	-	-	-	-
Total			22-0-8	21	550	550		100	

V Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UHUC500	HU	Management, Entrepreneurship and IPR	3-0-0	3	50	100	3	-	-
21UCSC500	PC	Database Management Systems	3-0-0	3	50	100	3	-	-
21UCSC501	PC	Object Oriented Modeling and Design Patterns	3-0-0	3	50	100	3	-	-
21UCSC502	PC	Web Technology	3-0-0	3	50	100	3	-	-
21UCSO5XX	OE	Open Elective - 1	3-0-0	3	50	100	3	-	-
21UCSL503	PC	Database Management Systems Lab	0-0-2	1	-	-	-	50	2
21UCSL504	PC	Web Technology Lab	0-0-2	1	-	-	-	50	2
21UAEE525	AE	Data Analysis and Visualization Tools [Python, Tableau etc.]	2-0-0	1	50	50	2	-	-
21UCSL505	PC	Minor Project - I	0-0-2	1	50	-	-	-	-
21UCSL506	PC	Internship	Minimum 2 weeks	1	50	-	-	-	-
Total			17-0-6	21	500	550	-	100	

VI Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UCSC600	PC	Computer Networks	3-0-0	3	50	100	3	-	-
21UCSC601	PC	Advanced Computer Architecture	3-0-0	3	50	100	3	-	-
21UCSC602	PC	Automata Theory & Compiler Design	3-0-0	3	50	100	3	-	-
21UCSE6XX	PE	Program Elective - 1	3-0-0	3	50	100	3	-	-
21UCSE6XX	PE	Program Elective - 2	3-0-0	3	50	100	3	-	-
21UCSO6XX	OE	Open Elective - 2	3-0-0	3	50	100	3	-	-
21UCSL603	PC	Computer Networks Lab	0-0-2	1	50	-	-	50	2
21UCSL604	PC	Automata Theory & Compiler Design Lab	0-0-2	1	50	-	-	50	2
21UCSL605	PC	Minor Project - II	0-0-3	1	50	-	-	50	2
21UHUL606	HU	Soft Skills and Aptitude	0-0-2	1	50	-	-	-	-
Total			18-0-9	22	500	600		150	

VII Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UCSC700	PC	Artificial Intelligence and Machine Learning	3-0-0	3	50	100	3	-	-
21UCSE7XX	PE	Program Elective - 3	3-0-0	3	50	100	3	-	-
21UCSE7XX	PE	Program Elective – 4	3-0-0	3	50	100	3	-	-
21UCSE7XX	PE	Program Elective - 5	3-0-0	3	50	100	3	-	-
21UCSO7XX	OE	Open Elective - 3	3-0-0	3	50	100	3	-	-
21UHUC700	HU	Research Methodology	2-0-0	2	50	50	2	-	-
21UCSL702	PC	Artificial Intelligence and Machine Learning Lab	0-0-2	1	50	-	-	50	2
21UCSL703	PC	Major Project Phase - 1	0-0-4	2	50	-	-	50	3
21UCSL704	PC	Internship - II	4-6 Weeks	3	50	-	-	50	3
Total			17-0-6	23	450	550		150	

VIII Semester

Course Code	Course Category	Course Title	Teaching		Examination				
			L-T-P (Hrs/Week)	Credits	CIE	Theory (SEE)		Practical (SEE)	
					Max. Marks	*Max. Marks	Duration in Hrs.	Max. Marks	Duration In Hrs.
21UCSL800	PC	Independent Study	0-0-2	1	50	-	-	-	-
21UCSL801	PC	Major Project – Phase II (in Industry / College / through Internship)	0-0-18	9	50	-	-	50	3
Total			0-0-20	10	100	-	-	50	-

Elective Pool

Course Titles (V Sem) 0+1	Course Titles (VI Sem) 2+1	Course Titles (VII Sem) 3+1
Internet of Things	Advanced Data Structures and Algorithms	Distributed Systems and Applications
Unix Systems Programming	Data Science	Cryptography and Network Security
Mobile Applications Development	Cloud Computing	Block chain Technology
Operations Research	Natural Language Processing	Multicore Architecture and Programming
Computer Graphics	Soft and Evolutionary Computing	Digital Image Processing
Advanced Graph Theory	Software Testing	Neuro Science
System Modeling and Simulation	Pattern Recognition	Deep Learning
	Ontology and Semantic Web	Ad-hoc Networks
	Embedded Systems	Network Management

