

**SDM College of Engineering and Technology, Dharwad**  
**Department of Electronics and Communication Engineering**

Scheme of Academic year 2021-22

**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.
18UMAC300	BS	Engg. Mathematics-III	3 - 0 - 0	3	50	100	3	-	-
18UECC300	PC	Electromagnetic Theory	3 - 2 - 0	4	50	100	3	-	-
18UECC301	PC	Digital Circuit Design	3 - 0 - 0	3	50	100	3	-	-
18UECC302	PC	Network Analysis	3 - 2 - 0	4	50	100	3	-	-
18UECC303	PC	Analog Electronic Devices and Circuits	4 - 0 - 0	4	50	100	3	--	--
18UECC304	PC	Signals & Systems	3 - 0 - 0	3	50	100	3	--	--
18UECL305	PC	Analog Electronic Devices and Circuits Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
18UECL306	PC	Digital Circuit Design Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
	<b>Total</b>		<b>19 - 4 - 6</b>	<b>24</b>	<b>400</b>	<b>600</b>		<b>100</b>	

### 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.
18UMAC400	BS	Engg. Mathematics-IV	3 - 0 - 0	3	50	100	3	-	-
18UECC400	PC	Communication Systems - I	4 - 0 - 0	4	50	100	3	-	-
18UECC401	PC	Control Systems	3 - 2 - 0	4	50	100	3	-	-
18UECC402	PC	Microcontroller	3 - 2 - 0	4	50	100	3	-	-
18UECC403	PC	HDL Programming Using Verilog	3 - 0 - 0	3	50	100	3	--	--
18UECC404	PC	Linear ICs and Applications	3 - 0 - 0	3	50	100	3	--	--
18UECL405	PC	HDL Programming Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
18UECL406	PC	Linear Integrated Circuits Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
18UECL407	PC	Introductory Project	0 - 0 - 2	1	50	--	--	--	--
<b>Total</b>			<b>19 - 4 - 8</b>	<b>25</b>	<b>450</b>	<b>600</b>		<b>100</b>	

BS- Basic Science, PC- Program Core **CIE**: Continuous Internal Evaluation **SEE**: Semester End Examination **L**:

Lecture **T**: Tutorials **P**: Practical

\*SEE for theory courses is conducted for 100 marks and reduced to 50 marks

### 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.
18UHUC500	HU	Management, Entrepreneurship and IPR	4 - 0 - 0	4	50	100	3	-	-
18UECC500	PC	CMOS VLSI Design	4 - 0 - 0	4	50	100	3	-	-
18UECC501	PC	Communication Systems -II	4 - 0 - 0	4	50	100	3	-	-
18UECC502	PC	Digital Signal Processing	3 - 0 - 0	3	50	100	3	-	-
18UECC503	PC	Information Theory & Coding	3 - 0 - 0	3	50	100	3	--	--
<b>18UECE5XX</b>	<b>PE</b>	<b>Program Elective-I</b>	3 - 0 - 0	3	50	100	3	--	--
18UECL504	PC	Communication Systems Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
18UECL505	PC	DSP Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
18UECL506	PC	Minor Project-1	0 - 0 - 2	1	50	--	--	--	--
18UHUL507	HU	Soft skills/Aptitude	0 - 0 - 2	1	50	--	--	--	--
<b>Total</b>			<b>21- 0 -10</b>	<b>26</b>	<b>500</b>	<b>600</b>		<b>100</b>	

#### Program Elective-I

18UECE510	PE	Object Oriented Programming using C++	3 - 0 - 0	3	50	100	3	--	--
18UECE511	PE	Telecommunication Networks	3 - 0 - 0	3	50	100	3	--	--
18UECE512	PE	Scientific Computing using Python	3 - 0 - 0	3	50	100	3	--	--
18UECE513	PE	Sensors and Transducers	3 - 0 - 0	3	50	100	3	--	--

HU- Humanities, PC- Program Core

**CIE:** Continuous Internal Evaluation      **SEE:** Semester End Examination

**L:** Lecture

**T:** Tutorials

**P:** Practical

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## 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.
18UECC600	PC	Analog & Mixed Mode VLSI Design	4 - 0 - 0	4	50	100	3	-	-
18UECC601	PC	IOT & Embedded System Design	4 - 0 - 0	4	50	100	3	-	-
18UECE6XX	PE	<b>Program Elective-II</b>	3 - 0 - 0	3	50	100	3	-	-
18UECE6XX	PE	<b>Program Elective-III</b>	3 - 0 - 0	3	50	100	3	-	-
18UECE6XX	OE	<b>Open Elective</b>	3 - 0 - 0	3	50	100	3	-	-
18UECL602	PC	Embedded Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
18UECL603	PC	VLSI Laboratory	0 - 0 - 3	1.5	50	--	--	50	3
18UECL604	PC	Minor Project-2	0 - 0 - 4	2	50	--	--	50	3
18UHUL605	HU	Soft skills/Aptitude	0 - 0 - 2	1	50	--	--	--	--
<b>Total</b>			<b>17 - 0 - 12</b>	<b>23</b>	<b>450</b>	<b>500</b>		<b>150</b>	

### Program Elective-II

18UECE610	PE	System Verilog	3 - 0 - 0	3	50	100	3	-	-
18UECE611	PE	Advanced Digital System Design	3 - 0 - 0	3	50	100	3	-	-
18UECE612	PE	Image Processing & Computer Vision	3 - 0 - 0	3	50	100	3	-	-
18UECE613	PE	Operating System	3 - 0 - 0	3	50	100	3	-	-

### Program Elective-III

18UECE620	PE	Speech Processing	3 - 0 - 0	3	50	100	3	-	-
18UECE621	PE	Robotics	3 - 0 - 0	3	50	100	3	-	-
18UECE622	PE	Data structure using C++	3 - 0 - 0	3	50	100	3	-	-
18UECE623	PE	Artificial Intelligence	3 - 0 - 0	3	50	100	3	-	-

**Open Elective**

18UECO630	OE	Cryptography	3 - 0 - 0	3	50	100	3	--	--
18UECO631	OE	Soft Computing	3 - 0 - 0	3	50	100	3	--	--
18UECO632	OE	Automotive Electronics	3 - 0 - 0	3	50	100	3	--	--
18UECO633	OE	Multimedia Communication	3 - 0 - 0	3	50	100	3	--	--
18UMAO675	OE	Applied Mathematics	3 - 0 - 0	3	50	100	3	--	--

PC- Program Core, PE-Program Elective, OE- Open Elective and HU- Humanities

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**L:** Lecture

**T:** Tutorials

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## 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.
18UECC700	PC	Antenna & Wave Propagation	4 - 0 - 0	4	50	100	3	-	-
18UECC701	PC	Computer Communication Networks	4 - 0 - 0	4	50	100	3	-	-
18UECE7XX	PE	<b>Program Elective-IV</b>	3 - 0 - 0	3	50	100	3	-	-
18UECO7XX	OE	<b>Open Elective</b>	3 - 0 - 0	3	50	100	3	-	-
18UECL702	PC	CCN Laboratory	0 - 0 - 2	1	50	--	--	50	3
18UECL703	PC	Major Project Phase-1	0 - 0 - 4	2	50	--	--	50	3
18UECL704	PC	Internship	4 w e e k s	2	50	--	--	50	3
<b>Total</b>			<b>14 - 0 - 6</b>	<b>19</b>	<b>350</b>	<b>400</b>		<b>150</b>	

18UECE7XX	PE	<b>Program Elective-IV</b>
18UECE710		MEMS
18UECE711		ASIC Design
18UECE712		VLSI DSP Systems
18UECE713		Optical Fiber Communication
18UECO7XX	OE	<b>Open Elective</b>
18UECO720		Machine Learning
18UECO721		Pattern Recognition
18UECO722		Multi Core Programming
18UECO723		Mobile Computing

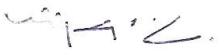
PC- Program Core, PE-Program Elective, OE- Open Elective

## 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.
18UECC800	PC	Wireless Communication	4 - 0 - 0	4	50	100	3	-	-
18UECE8XX	PE	<b>Program Elective-V</b>	3 - 0 - 0	3	50	100	3	-	-
18UECO8XX	OE	<b>Open Elective</b>	3 - 0 - 0	3	50	100	3	--	--
18UECL801	PC	Technical Seminar	0 - 0 - 2	1	50	--	--	--	--
18UECL802	PC	Major Project Phase-2	0-0 -12	7	50	--	--	50	3
<b>Total</b>			<b>10- 0 - 14</b>	<b>18</b>	<b>250</b>	<b>300</b>	<b>--</b>	<b>50</b>	<b>--</b>

18UECE8XX	PE	<b>Program Elective-V</b>
18UECE810		Adhoc Wireless Networks
18UECE811		Re-configurable Design
18UECE812		Low Power VLSI Design
18UECE813		Digital Signal Compression
18UECO8XX	OE	<b>Open Elective</b>
18UECO820		DSP Architecture
18UECO821		CAD for VLSI
18UECO822		Operation Research
18UECO823		Advanced Computer Architecture

PC- Program Core, PE-Program Elective and OE- Open Elective

  
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