

B.Sc(MECs) - Electronics Course Structure (W.E.F 2022-23)

Paper Code	Paper	Hours/Week		Credits	Max. Marks
		Theory	Practical		
CA-1-EL-22T	I Year / Semester I: Paper – 1 -DSC Circuit Analysis (Theory)	4	-----	4	100
CA-1-EL-22P	I Year / Semester I: Paper – 1 - DSC Circuit Analysis (Practical)	-----	3	1	50
EDC-2-EL-22T	I Year /Semester II: Paper - 2 - DSC Electronic Devices & Circuits (Theory)	4	-----	4	100
EDC-2-EL-22P	I Year / Semester II: Paper - 2 - DSC Electronic Devices & Circuits (Practical)	-----	3	1	50
AC-3-EL-23T	II Year / Semester III: Paper –3 - DSC Analog Circuits (Theory)	4	-----	4	100
AC-3-EL-23P	II Year / Semester III: Paper –3 - DSC Analog Circuits (Practical)	-----	3	1	50
LIC-4-EL-23T	II Year / Semester IV: Paper – 4 - DSC Linear Integrated Circuits & Basic Communication Electronics. (Theory)	4	-----	4	100
LIC-4-EL-23P	II Year / Semester IV: Paper – 4 - DSC Linear Integrated Circuits & Basic Communication Electronics. (Practical)	-----	3	1	50
DE-5-EL-24T	III Year / Semester V: Paper – 5 - DSE Digital Electronics (Theory)	4	-----	3	100
DE-5-EL-24P	III Year / Semester V: Paper – 5 - DSE Digital Electronics (Practical)	-----	3	1	50
BE-5-EL-25T FDE-5-EL-25T	III Year / Semester V: Paper – 6 - GE 1. Basics of Electronics (Theory) 2. Fundamentals of Digital Electronics (Theory)	4	-----	4	100
BAP-5-EL-25T	III Year / Semester V: Paper–SEC-3 Basic Arduino Programming	2	-----	2	50
MC-6-EL-25T DD-6-EL-25T	III Year / Semester VI: Paper–7 - DSE 1. 8051 Microcontroller (Theory) 2. Digital Design using VHDL (Theory)	4	-----	3	100
MC-6-EL-25P DD-6-EL-25P	III Year / Semester VI: Paper–7 - DSE 1. 8051 Microcontroller (Practical) 2. Digital Design using VHDL (Practical)	-----	3	1	50
FR-6-EL-25T	III Year / Semester VI: Paper–SEC-4 Fundamentals of Robotics	2	-----	2	50
PR-6-EL-25	III Year / Semester VI: Project	2	-----	4	100
Total				40	

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**B.Sc. (MECs) Course Structure for CBCS
w.e.f 2022 -23**

First Semester

Subject Code	Course Type	Course Title	Hours/Week		Credits	Max. Marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
BCS-1-CC-22T	AECC1	Basic Computer Skills	2	--	2		100	100	2
ENG-1-EN-22T	CC	English - I	4	1	5	40	60	100	3
AR-1-SL-22T/ FR-1-SL-22T/ HI-1-SL-22T/ SK-1-SL-22T/ TL-1-SL-22T	CC	Second language	5	--	5	40	60	100	3
DIC-1-MM-22T	DSCT	Mathematics-I Differential & Integral Calculus (Theory)	4	--	4	40	60	100	3
CA-1-EL-22T	DSCT	Electronics – I Circuit Analysis (Theory)	4	--	4	40	60	100	3
OOP-1-CS-22T	DSCT	Computer Science-I: Object Oriented Programming Using C++ (Theory)	4	--	4	40	60	100	3
DIC-1-MM-22P	DSCP	Mathematics-I Differential & Integral Calculus (Practical)	--	3	1	20	30	50	3
CA-1-EL-22P	DSCP	Electronics-I Circuit Analysis (Practical)	--	3	1	20	30	50	3
OOP-1-CS-22P	DSCP	Computer Science-I: Object Oriented Programming Using C++ Computer Science (Practical)	--	3	1	20	30	50	3
		Total	23	10	27	260	490	750	

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w.e.f 2022 -23**

First Semester

Subject Code	Course Type	Course Title	Hours/Week		Credits	Max. Marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
BCS-1-CC-22T	AECC1	Basic Computer Skills	2	--	2		100	100	2
ENG-1-EN-22T	CC	English - I	4	1	5	40	60	100	3
AR-1-SL-22T/ FR-1-SL-22T/ HI-1-SL-22T/ SK-1-SL-22T/ TL-1-SL-22T	CC	Second language	5	--	5	40	60	100	3
DIC-1-MM-22T	DSCT	Mathematics-I Differential & Integral Calculus (Theory)	4	--	4	40	60	100	3
CA-1-EL-22T	DSCT	Electronics – I Circuit Analysis (Theory)	4	--	4	40	60	100	3
OOP-1-CS-22T	DSCT	Computer Science-I: Object Oriented Programming Using C++ (Theory)	4	--	4	40	60	100	3
DIC-1-MM-22P	DSCP	Mathematics-I Differential & Integral Calculus (Practical)	--	3	1	20	30	50	3
CA-1-EL-22P	DSCP	Electronics-I Circuit Analysis (Practical)	--	3	1	20	30	50	3
OOP-1-CS-22P	DSCP	Computer Science-I: Object Oriented Programming Using C++ Computer Science (Practical)	--	3	1	20	30	50	3
		Total	23	10	27	260	490	750	

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First Semester

Subject Code	Course Type	Course Title	Hours/Week		Credits	Max. Marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
BCS-1-CC-22T	AECC1	Basic Computer Skills	2	--	2		100	100	2
ENG-1-EN-22T	CC	English - I	4	1	5	40	60	100	3
AR-1-SL-22T/ FR-1-SL-22T/ HI-1-SL-22T/ SK-1-SL-22T/ TL-1-SL-22T	CC	Second language	5	--	5	40	60	100	3
DIC-1-MM-22T	DSCT	Mathematics-I Differential & Integral Calculus (Theory)	4	--	4	40	60	100	3
CA-1-EL-22T	DSCT	Electronics – I Circuit Analysis (Theory)	4	--	4	40	60	100	3
OOP-1-CS-22T	DSCT	Computer Science-I: Object Oriented Programming Using C++ (Theory)	4	--	4	40	60	100	3
DIC-1-MM-22P	DSCP	Mathematics-I Differential & Integral Calculus (Practical)	--	3	1	20	30	50	3
CA-1-EL-22P	DSCP	Electronics-I Circuit Analysis (Practical)	--	3	1	20	30	50	3
OOP-1-CS-22P	DSCP	Computer Science-I: Object Oriented Programming Using C++ Computer Science (Practical)	--	3	1	20	30	50	3
		Total	23	10	27	260	490	750	

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Second Semester

Subject Code	Course Type	Course Title	Hours /Week		Credits	Max marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
EVS-2-EN-22T	AECC	Environmental Studies	2	--	2	---	100	100	2
ENG-2-EN-22T	CC	English - II	4	1	5	40	60	100	3
AR-2-SL-22T/ FR-2-SL-22T/ HI-2-SL-22T/ SK-2-SL-22T/ TL-2-SL-22T/	CC	Second language	5	--	5	40	60	100	3
DE-2-MM-22T	DSCT	Mathematics-II Differential Equations (Theory)	4	--	4	40	60	100	3
EDC-2-EL-22T	DSCT	Electronics-II Electronic Devices & Circuits (Theory)	4	--	4	40	60	100	3
DS-2-CS-22T	DSCT	Computer Science-II Data Structures (Theory)	4	--	4	40	60	100	3
DE-2-MM-22P	DSCP	Mathematics-II Differential Equations (Practical)	--	3	1	20	30	50	3
EDC-2-EL-22P	DSCP	Electronics-II II Electronic Devices & Circuits (Practical)	--	3	1	20	30	50	3
DS-2-CS-22P	DSCP	Computer Science-II Data Structures (Practical)	--	3	1	20	30	50	3
Total			23	10	27	260	490	750	

Total No of Credits by the end of First Year : 54


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Third Semester

Subject Code	Course Type	Course Title	Hours/Week		Credits	Max marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
HVGS-3-EN-23T / LS-3-BM-23T	SEC-1	UGC Specified – SEC Human Values and Gender Sensitization / Leadership Skills	2	--	2	40	60	100	2
ENG-3-EN-23T	CC	English - III	4	1	5	40	60	100	3
AR-3-SL-23T/ FR-3-SL-23T/ HI-3-SL-23T/ SK-3-SL-23T/ TL-3-SL-23T	CC	Second Language	5	--	5	40	60	100	3
RA-3-MM-23T	DSCT	Mathematics-III Real Analysis (Theory)	4	--	4	40	60	100	3
AC-3-EL-23T	DSCT	Electronics-III Analog Circuits (Theory)	4	--	4	40	60	100	3
RD-3-CS-23T	DSCT	Computer Science-III Relational Database Management System (Theory)	4	--	4	40	60	100	3
RA-3-MM-23P	DSCP	Mathematics-III Real Analysis (Practical)	--	3	1	20	30	50	3
AC-3-EL-23P	DSCP	Electronics-III Analog Circuits (Practical)	--	3	1	20	30	50	3
RD-3-CS-23P	DSCP	Computer Science-III Relational Database Management System (Practical)	--	3	1	20	30	50	3
		Total	23	10	27	300	450	750	

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Fourth Semester

Subject Code	Course Type	Course Title	Hours/Week		Credits	Max Marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
BE-4-EN-23T/ EE-4-EN-23T	SEC 2	UGC Specified – SEC Business English / English for Employability	2	--	2	40	60	50	2
ENG-4-EN-23T	CC	English - IV	4	1	5	40	60	100	3
AR-4-SL-23T/ FR-4-SL-23T/ HI-4-SL-23T/ SK-4-SL-23T/ TL-4-SL-23T	CC	Second Language	5	--	5	40	60	100	3
ALG-4-MM-23T	DSCT	Mathematics-IV Algebra (Theory)	4	--	4	40	60	100	3
LIC-4-EL-23T	DSCT	Electronics-IV Linear Integrated Circuits and Basic Communication Electronics(Theory)	4	--	4	40	60	100	3
JV-4-CS-23T	DSCT	Computer Science - IV Java Programming (Theory)	4	--	4	40	60	100	3
ALG-4-MM-23P	DSCP	Mathematics-IV Algebra (Practical)	--	3	1	20	30	50	3
LIC-4-EL-23P	DSCP	Electronics-IV Linear Integrated Circuits and Basic Communication Electronics (Practical)	--	3	1	20	30	50	3
JV-4-CS-23P	DSCP	Computer Science-IV Java Programming (Practical)	--	3	1	20	30	50	3
Total			23	10	27	300	450	750	

Total No of Credits by the end of Second Year 108

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Fifth Semester

Subject Code	Course Type	Course Title	Hours/Week		Credits	Max Marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
TE-5-MM-24T/ LS-5-MM-24T	SEC 3	Mathematics: Theory of Equations / Logic & Sets	2	--	2	20	30	50	2
BAP-5-EL-24T		Electronics: Basic Arduino Programming							
HP-5-CS-24T		Computer Science: HTML Programming							
LA-5-MM-24T	DSCT	Mathematics-V Linear Algebra (Theory)	4	--	4	40	60	100	3
DE-5-EL-24T	DSET	Electronics – V: Digital Electronics (Theory)	4	--	4	40	60	100	3
WT-5-CS-22T SE-5-CS-24T PY-5-CS-24T	DSET	Computer Science 1. Web Technologies 2. Software Engineering 3. Programming in Python (Theory):	4	--	4	40	60	100	3
LA-5-MM-24P	DSCP	Mathematics-V Linear Algebra (Practical)	--	3	1	20	30	50	3
DE-5-EL-24P	DSEP	Electronics-V Digital Electronics (Practical)	--	3	1	20	30	50	3
WT-5-CS-22P SE-5-CS-24P PY-5-CS-24P	DSEP	Computer Science 1. Web Technologies 2. Software Engineering 3. Programming in Python (Practical)	--	3	1	20	30	50	3
BM-5-MM-24T MEF-5-MM-24T	GE- Generic Elective	Mathematics- Basic Mathematics /Mathematics for Economics & Finance (Theory)	4	--	4	40	60	100	3
BE-5-EL-24T FDE-5-EL-24T	GE- Generic Elective	Electronics- Elective: 1. Basic Electronics 2. Fundamentals of Digital Electronics (Theory)		--					
DM-5-CS-24T WD-5-CS-24T	GE- Generic Elective	Computer Science 1. Basics of Digital Marketing 2. Web development using Word Press (Theory)		--					
Total			18	9	21	240	360	600	



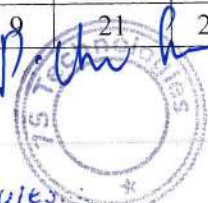
Sixth Semester

Subject Code	Course Type	Course Title	Hours/Week		Credits	Max Marks		Total Marks	Duration of Exam (Hrs)
			L	P/T		Int	Ext		
NT-6-MM-24T / VC-6-MM-24T	SEC 4	Mathematics: Number Theory / Vector Calculus	2	--	2	20	30	50	2
FR-6-EL-24T		Electronics: Fundamentals of Robotics							
		Computer Science							
NA-6-MM-24T / IT-6-MM-24T /ASG-6-MM-24T	DSET	Mathematics - VI A. Numerical Analysis (Theory)	4	--	4	40	60	100	3
		B. Integral Transforms (Theory)							
		C. Analytical Solid Geometry (Theory)							
MC-6-EL-24T DD-6-EL-24T	DSET	Electronics-VI 1. 8051 Microcontroller (Theory) 2. Digital Communication (Theory)	4	--	4	40	60	100	3
CNC-6-CS-24T ST-6-CS-24T OS-6-CS-24T	DSET	Computer Science 1. Computer Networks & Cloud Computing 2. Software Testing 3. Operating Systems (Theory)	4	--	4	40	60	100	3
NA-6-MM-24P / IT-6-MM-24P /ASG-6-MM-24P	DSEP	A. Numerical Analysis (Practical)	--	3	1	20	30	50	3
		B. Integral Transforms (Practical)							
		C. Analytical Solid Geometry (Practical)							
MC-6-EL-24P DD-6-EL-24P	DSEP	1. 8051 Microcontroller (Theory) 2. Digital Communication (Practical)	--	3	1	20	30	50	3
CNC-6-CS-24P ST-6-CS-24P OS-6-CS-24P	DSEP	Computer Science: 1. Computer Networks & Cloud Computing 2. Software Testing 3. Operating Systems (Practical)	--	3	1	20	30	50	3
MP-6-MM-24/MM-6-MM-24T/SP-6-ST-24/OR-6-ST-24T/CP-6-CS-24 /PR-6-EL-24	Project	Mathematics Project/ Mathematical Modeling. Electronics Project/Operations Research Computer Science Project:	4	--	4	40	60	100	3
		Total	18	9	21	240	360	600	

Total No of Credits by the End of Third Year 150

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