

Programme Core	Programme Elective	University Core	University Elective	Total Credits
60	35	53	12	160

Course Code	Course Title	Course Type	L	T	P	J	C
PROGRAMME CORE							
EEE1001	Basic Electrical and Electronics Engineering	ETL	2	0	2	0	3
MAT2002	Applications of Differential and Difference Equations	ETL	3	0	2	0	4
MAT3003	Complex Variables and Partial Differential Equations	TH	3	2	0	0	4
MAT3005	Applied Numerical Methods	TH	3	2	0	0	4
MEE1001	Engineering Drawing	ETL	1	0	4	0	3
MEE1002	Engineering Mechanics	TH	2	2	0	0	3
MEE1003	Engineering Thermodynamics	TH	2	2	0	0	3
MEE1004	Fluid Mechanics	ETL	2	2	2	0	4
MEE1005	Materials Engineering and Technology	ETL	3	0	2	0	4
MEE1007	Manufacturing Processes	ETL	2	0	2	0	3
MEE2001	Machine Drawing	ETL	1	0	4	0	3
MEE2002	Strength of Materials	ETL	2	2	2	0	4
MEE2003	Thermal Engineering Systems	ETL	2	2	2	0	4
MEE2004	Mechanics of Machines	ETL	2	2	2	0	4
MEE2005	Heat Transfer	ETL	2	2	2	0	4
MEE2006	Machining Processes and Metrology	ETL	2	0	2	0	3
MEE3001	Design of Machine Elements	TH	2	2	0	0	3
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PROGRAMME ELECTIVE							
CHE2006	Fuels and Combustion	TH	3	0	0	0	3
EEE2007	Electronics and Microcontrollers	ETP	2	0	0	4	3
EEE3001	Control Systems	ETL	3	0	2	0	4
MEE1008	MEMS	TH	3	0	0	0	3
MEE1009	New Product Development	ETP	2	0	0	4	3
MEE1011	Renewable Energy Sources	ETL	2	2	2	0	4
MEE1012	Alternative Fuels	TH	3	0	0	0	3
MEE1014	Industrial Engineering and Management	TH	3	0	0	0	3
MEE1015	Total Quality Management and Reliability	TH	3	0	0	0	3
MEE1016	Lean Enterprises and New Manufacturing Technology	TH	3	0	0	0	3
MEE1017	New Venture Planning and Management	ETP	2	0	0	4	3
MEE1018	Facilities and Process Planning	TH	3	0	0	0	3
MEE1024	Operations Research	TH	2	2	0	0	3
MEE1027	Instrumentation and Control Engineering	ETL	3	0	2	0	4
MEE1030	Robotics	ETL	2	0	2	0	3

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MEE1045	Mechatronics Systems Design	ETP	3	0	0	4	4
MEE2007	CAD/CAM	ETL	2	0	4	0	4
MEE2008	Product Design for Manufacturing	ETP	2	0	0	4	3
MEE2009	Tribology	TH	2	2	0	0	3
MEE2010	Design of Composite Materials	TH	2	2	0	0	3
MEE2011	Welding Engineering	ETP	2	0	0	4	3
MEE2012	Manufacturing Automation	ETL	3	0	2	0	4
MEE2013	Modelling and Simulation of Manufacturing Systems	ETP	3	0	0	4	4
MEE2014	Metal Casting Technology	ETP	2	0	0	4	3
MEE2015	Non Destructive Testing	ETL	3	0	2	0	4
MEE2016	Rapid Manufacturing Technologies	ETP	2	0	0	4	3
MEE2019	Materials Characterization Techniques	ETP	2	0	0	4	3
MEE2020	Metal Forming Theory and Practice	TH	3	0	0	0	3
MEE2022	Power Plant Engineering	TH	3	0	0	0	3
MEE2023	Gas Dynamics and Jet Propulsion	TH	2	2	0	0	3
MEE2025	Fluid Power Systems	ETL	3	0	2	0	4
MEE2026	Turbo Machines	ETL	2	2	2	0	4
MEE2067	Computational Multibody Dynamics	ETP	3	0	0	4	4
MEE3002	Finite Element Analysis	ETL	2	2	2	0	4
MEE3003	Engineering Failure Analysis	ETP	3	0	0	4	4
MEE3004	Internal Combustion Engines	TH	3	0	0	0	3
MEE3005	Refrigeration and Airconditioning	TH	3	2	0	0	4
MEE3006	Automobile Engineering	ETL	2	0	2	0	3
MEE3008	Mechanical Vibrations	ETL	2	2	2	0	4
MEE3010	Robot Dynamics and Applications	TH	3	0	0	0	3
MEE4001	Tool Design	ETP	3	0	0	4	4
MEE4002	Advanced Machining Processes	ETP	2	0	0	4	3
MEE4003	Micro and Nano Machining	TH	3	0	0	0	3
MEE4005	Surface Engineering	TH	3	0	0	0	3
MEE4006	Computational Fluid Dynamics	ETL	2	2	2	0	4
MEE4007	Design of Transmission Systems	ETP	2	2	0	4	4
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UNIVERSITY CORE							
CHY1701	Engineering Chemistry	ETL	3	0	2	0	4
CSE1001	Problem Solving and Programming	LO	0	0	6	0	3
CSE1002	Problem Solving and Object Oriented Programming	LO	0	0	6	0	3
ENG1901	Technical English - I	LO	0	0	4	0	2
ENG1902	Technical English - II	LO	0	0	4	0	2



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ENG1903	Advanced Technical English	ELP	0	0	2	4	2
HUM1021	Ethics and Values	TH	2	0	0	0	2
MAT1011	Calculus for Engineers	ETL	3	0	2	0	4
MAT2001	Statistics for Engineers	ETL	3	0	2	0	4
MEE1901	Technical Answers for Real World Problems (TARP)	ETP	1	0	0	4	2
MEE1902	Industrial Internship	PJT	0	0	0	0	1
MEE1903	Comprehensive Examination	PJT	0	0	0	0	1
MEE1904	Capstone Project	PJT	0	0	0	0	12
MGT1022	Lean Start-up Management	ETP	1	0	0	4	2
PHY1701	Engineering Physics	ETL	3	0	2	0	4
PHY1901	Introduction to Innovative Projects	TH	1	0	0	0	1
FLC4097	Foreign Language Course Basket	CDB	0	0	0	0	2
ESP1001 - ESPANOL FUNDAMENTAL - TH							
ESP2001 - ESPANOL INTERMEDIO - ETL							
FRE1001 - Francais quotidien - TH							
FRE2001 - Francais progressif - ETL							
GER1001 - Grundstufe Deutsch - TH							
GER2001 - Mittelstufe Deutsch - ETL							
GRE1001 - Modern Greek - TH							
JAP1001 - Japanese for Beginners - TH							
RUS1001 - Russian for Beginners - TH							
STS4097	Soft Skills B.Tech. / B.Des.	CDB	0	0	0	0	6
STS1001 - Introduction to Soft Skills - SS							
STS1002 - Introduction to Business Communication - SS							
STS1101 - Fundamentals of Aptitude - SS							
STS1102 - Arithmetic Problem Solving - SS							
STS1201 - Introduction to Problem Solving - SS							
STS1202 - Introduction to Quantitative, Logical and Verbal Ability - SS							
STS2001 - Reasoning Skill Enhancement - SS							
STS2002 - Introduction to Etiquette - SS							
STS2101 - Getting Started to Skill Enhancement - SS							
STS2102 - Enhancing Problem Solving Skills - SS							
STS2201 - Numerical Ability and Cognitive Intelligence - SS							
STS2202 - Advanced Aptitude and Reasoning Skills - SS							
STS3001 - Preparedness for External Opportunities - SS							
STS3004 - Data Structures and Algorithms - SS							
STS3005 - Code Mithra - SS							
STS3006 - Preparedness for External Opportunities - SS							
STS3007 - Preparedness for Career Opportunities - SS							
STS3101 - Introduction to Programming Skills - SS							
STS3104 - Enhancing Programming Ability - SS							
STS3105 - Computational Thinking - SS							



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STS3201	Programming Skills for Employment - SS						
STS3204	JAVA Programming and Software Engineering Fundamentals - SS						
STS3205	Advanced JAVA Programming - SS						
STS3301	JAVA for Beginners - SS						
STS3401	Foundation to Programming Skills - SS						
STS5002	Preparing for Industry - SS						
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BRIDGE COURSE							
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NON CREDIT COURSE							
CHY1002	Environmental Sciences	TH	3	0	0	0	3
ENG1000	Foundation English - I	LO	0	0	4	0	2
ENG2000	Foundation English - II	LO	0	0	4	0	2
EXC4097	Co-Extra Curricular Basket	CDB	0	0	0	0	2
EXC1001 - Service to the Society - ECA							
EXC1002 - Youth Red Cross - ECA							
EXC1002 - Red Cross - ECA							
EXC1003 - ABCD-AnyBody Can Dance - ECA							
EXC1004 - Entrepreneurs Cell - ECA							
EXC1004 - Building Entrepreneurship Competencies and Skills - ECA							
EXC1005 - Energy and Environmental Protection Club - ECA							
EXC1006 - Music - The Art of Culture - ECA							
EXC1007 - Sports for Healthy Life - ECA							
EXC1008 - Instrumentation for Engineers - ECA							
EXC1009 - Debating Skills - ECA							
EXC1010 - Mobility Engineering- Land, Air and Sea - ECA							
EXC1011 - Skills in Competitive Coding - ECA							
EXC1012 - Basics of Space Sciences - ECA							
EXC1013 - Roadmap to a Connected World - ECA							
EXC1014 - Dramatics Club - ECA							
EXC1014 - The Art of Acting - ECA							
EXC1016 - ASCE - VIT Student Chapter - ECA							
EXC1017 - Health Club - ECA							
EXC1017 - Health and Wellness - ECA							
EXC1018 - IETE - Student Chapter - ECA							
EXC1018 - Electronics and Telecommunication for Skill Development - ECA							
EXC1019 - The Fine Arts Club - ECA							
EXC1019 - Basic Art and Craft Techniques - ECA							
EXC1020 - Skills on Creativity - ECA							
EXC1021 - Computer Society of India - ECA							
EXC1021 - Computer in Society - ECA							
EXC1023 - Hindi Literary Association - ECA							

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EXC1023	Hindi Arts and Literature - ECA						
EXC1025	Toastmasters International - VIT Chapter - ECA						
EXC1027	Power and Energy for Societal Development - ECA						
EXC1028	VIT Community Radio - ECA						
EXC1030	Make a Difference - ECA						
EXC1030	Child Empowerment and Development - ECA						
EXC1032	Fifth Pillar - ECA						
EXC1032	Building Blocks of Democracy - ECA						
EXC1033	Robotics for Engineers - ECA						
EXC1034	Techloop - ECA						
EXC1035	Association for Computing Machinery - ECA						
EXC1035	Computing in Science and Engineering - ECA						
EXC1049	Innovation for Engineering Applications - ECA						
EXC1054	The Art and Skills of Photography - ECA						
EXC1061	Skill Development in Manufacturing - ECA						
EXC1068	Discussion through Media - ECA						
EXC1069	Fep-Si - ECA						
EXC1070	Working to Engineer a Better World - ECA						
EXC1071	Culinary Crusade - ECA						
EXC1072	VIT Film Society - ECA						
EXC1072	The Art and Skills of Film Making - ECA						
EXC1075	The Institution of Engineers (India) - ECA						
EXC1075	ENGINEERING SKILLSET - ECA						
EXC1076	Tamil Arts and Literature - ECA						
EXC1077	National Cadet Corps (NCC) - ECA						
EXC1078	VIT Spartans - ECA						
EXC1078	Learning with Spartans - ECA						
EXC1079	Anokha - ECA						
EXC1079	Inception of Change - ECA						
EXC1080	American Society of Mechanical Engineers - ECA						
EXC1081	Open Source Development for Google Applications - ECA						
EXC1082	Telugu Literary Association - ECA						
EXC1083	Mozilla Firefox - ECA						
EXC1083	Open Source User Interface - ECA						
EXC1084	Apple Developers Group - ECA						
EXC1084	IOS Platform - ECA						
EXC1085	Technology And Gaming Club (TAG) - ECA						
EXC1087	Engineering in Medicine and Biology - ECA						
EXC1088	Energy for Societal Development - ECA						
EXC1090	Economic Development and Commercial Sciences - ECA						
EXC1095	Skills in Financial Investment - ECA						
EXC1097	Practical Fundamentals of Chemical Engineering - ECA						
EXC1100	Experiential Learning of Energy Engineers - ECA						



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EXC1101	Mathsomania - ECA						
EXC1102	Art of Research and Publication - ECA						
EXC1107	Skills on Chemical Engineering - ECA						
EXC1110	Engineering for Industrial Applications - ECA						
EXC1111	TechEd - ECA						
EXC1114	Communication in Technology and Networking - ECA						
EXC1120	Creativity Club - ECA						
EXC1121	Social Entrepreneurship - ECA						
EXC1124	Humanitarian Service - ECA						
EXC1127	Debating on Internal Issues - ECA						
EXC1129	Uddeshya - ECA						
EXC1129	Peer Educator Training Programme - ECA						
EXC1132	The way of Living - ECA						
EXC1134	Child Care and Education - ECA						
EXC1135	Kannada Arts and Literature - ECA						
EXC1157	Trekking Club - ECA						
EXC4097	Co/Extra Curricular - ECA						