



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Kakinada-533003, Andhra Pradesh (India)

Program wise Curriculum Analysis of (R20)

Program Code	Program Name	No of Courses having focus on			Total Courses	Percentage
		Employability	Entrepreneurship	Skill development		
03	B.TECH-ME	8	4	27	68	57
15	M.TECH-MD	5	1	8	20	70
04	M.TECH-CAD/CAM	3	1	8	20	60

Nhp
Coordinator

[Signature]
HOD/Director
Mechanical Engineering Department
University College of Engineering
J.N.T. University Kakinada
KAKINADA

[Signature]
REGISTRAR
J.N.T. University Kakinada
Kakinada-533003



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Kakinada-533003, Andhra Pradesh (India)

Course wise Curriculum Analysis(R20)

Program Code: 03

Program Name: B.Tech - ME

Year: II

Semester: I

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
BSC-5	Mathematics-III (Transforms, PDE and Vector Calculus)			
PCC-1	Mechanics of Solids			
PCC-2	Production Technology			
PCC-3	Fluid Mechanics & Hydraulic Machines			
PCC-4	Kinematics of Machinery			
PCC-L1	Machine Drawing			
PCC-L2	Production Technology Lab			Yes
PCC-L3	Fluid Mechanics and Hydraulic Machines lab			Yes
SOC-1	Computer Aided Drafting and Modeling Lab			Yes
MC-4	Essence of Indian Traditional Knowledge (AICTE Mandate Course)			
	Total			3



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Year: II

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Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
BSC-6	Mathematics-IV (Complex Variables and Statistical Methods)			
ESC-6	Materials Science & Engineering			
PCC-5	Dynamics of Machinery			
PCC-6	Thermal Engineering-I			
HSC-2	Managerial Economics & Financial Accounting		Yes	
PCC-L4	Theory of Machines Lab			Yes
PCC-L5	Thermal Engineering Lab			Yes
ESC-L4	Materials Testing lab			Yes
SOC-2	Numerical Simulation Lab			Yes
	Total		1	4



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Course wise Curriculum Analysis(R20)

Program Code: 03

Program Name: B.Tech - ME

Year: III

Semester: I

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
PCC-7	Thermal Engineering-II			
PCC-8	Design of Machine Members-I			
PCC-9	Metal Cutting & Machine Tools			
OE-1	1. Green Engineering Systems 2. Industrial Management 3. Nano Technology	Yes		
PE-1	1. Finite Element Methods 2. Industrial Robotics 3. Advanced Materials 4. Renewable Energy Sources 5. Mechanics of Composites 6. MOOCs (NPTEL/ Swayam) Course (12 Week duration)		Yes	
PCC-L6	Machine Tools Lab			Yes
PCC-L7	CAM & CAE Lab			Yes
SOC-3	ADVANCED COMMUNICATION SKILLS LAB			Yes
MC - 5	Environmental Science			Yes
	Evaluation of Summer Internship, completed after II B.Tech II Semester			Yes



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Course wise Curriculum Analysis(R20)

Program Code: 03

Program Name: B.Tech - ME

Year: III

Semester: II

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
PCC-10	Heat Transfer			
PCC-11	Design of Machine Members-II			
PCC-12	Mechanical Measurements & Metrology			
PE-2	1. Automobile Engineering 2. CAD/CAM 3. Advanced Mechanics of Solids 4. Statistical Quality Control 5. Industrial Hydraulics and Pneumatics 6. MOOCs (NPTEL/ Swayam) Course (12 Week duration)	Yes		
OE-2	1. Industrial Robotics 2. Essentials of Mechanical Engineering 3. Advanced Materials	Yes		
PCC-L8	Heat Transfer Lab			Yes
PCC-L9	simulation Lab			Yes
PCC-L10	Measurements & Metrology Lab			Yes
SOC-4	Python Programming Lab			Yes
MC - 6	Research Methodology		Yes	Yes
	Total	2	1	4



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Kakinada-533003, Andhra Pradesh (India)

Course wise Curriculum Analysis(R20)

Program Code: 03

Program Name: B.Tech - ME

Year: IV

Semester: I

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
PE-3	1. Mechanical Vibrations 2. Operations Research 3. Unconventional Machining Processes 4. Computational Fluid Dynamics 5. Gas Dynamics and Jet Propulsion 6. MOOCs (NPTEL/Swayam) Course (12 Week duration)	Yes		
PE-4	1. Automation in Manufacturing 2. Power Plant Engineering 3. Tribology 4. Production Planning Control 5. Condition Monitoring 6. MOOCs (NPTEL/Swayam) Course (12 Week duration)	Yes		
PE-5	1. Advanced Manufacturing Processes 2. Mechatronics 3. Refrigeration & Air-Conditioning 4. Additive Manufacturing 5. Non Destructive Evaluation 6. MOOCs (NPTEL/Swayam) Course (12 Week duration)	Yes		
OE-3	1. Additive manufacturing 2. Mechatronics 3. Finite Element Methods			
OE-4	1. Optimization Techniques 2. Computer Graphics 3. Total Quality Management			
HSC-3	Universal Human Values: Understanding Harmony		Yes	

SOC-5	Mechatronics Lab			Yes
	Evaluation of Summer Internship completed after III B.Tech II Semester			Yes
	Total	3	1	2



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Course wise Curriculum Analysis(R20)

Program Code: 1A02

Program Name: B.Tech

Year: IV

Semester: II

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
1	Project work(6 Months)			YES
	TOTAL			1

Nh2