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

Program wise Curriculum Analysis(R19)

Program Code	Program Name	No of Courses having focus on			Total Courses	Percentage
		Employability	Entrepreneurship	Skill development		
03	M.Tech – Biotechnology	9	1	7	17	85%

NM

Coordinator

Chairman, Board of Studies

REGISTRAR
J.N.T. University Kakinada
Kakinada-533003

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Kakinada-533003, Andhra Pradesh (India)

Course wise Curriculum Analysis (R19)

Program Code: 03   Program Name: M.Tech -Biotechnology   Year: 1   Semester: 1

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
Core-1	Advanced Bioprocess Engineering	Yes		
Core-2	Immune technology	yes		
Elective-1	1. Protein Engineering.. 2. Advances in Fermentation Technology & Downstream 3. Tissue Engineering.	Yes		
Elective-2	1 .MedicalBiotechnology. 2. Modeling, Simulation and Optimization of Bioprocess. 3. Biological treatment of wastewater.	Yes		
Core	Research Methodology and IPR		Yes	
Lab-1	Advanced Bioprocess & Downstream processing Laboratory			Yes
Lab-2	Immunotechnology Laboratory			
Audit –1	Audit Course –1			Yes
Total		4	1	2

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Kakinada-533003, Andhra Pradesh (India)

Course wise Curriculum Analysis(R19)

Program Code: 03   Program Name: M.Tech - Biotechnology   Year: 1   Semester: 2

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
Core-3	Molecular Biology & Genetic Engineering	Yes		
Core-4	Systems Biology	Yes		
Elective-3	1. 1. Advances in Bioinformatics. 2. Advancements in Bioreactor Design. 3. Agriculture Biotechnology	Yes		
Elective-4	1. Membrane Biology & Signal Transduction. 2. Biofuels & Bioenergy. 3. Advanced Biostatistics.	YES		
Lab-3	Molecular Biology & Genetic Engineering Laboratory			
Lab-4	Bioinformatics laboratory			yes
Core	Mini Project with Seminar			yes
Audit –2	Audit Course –1			yes
	Total	4		3

Course wise Curriculum Analysis (R19)

Program Code: 03   Program Name: M.Tech –Biotechnology   Year: 2   Semester: 3

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
Elective-V	1. Bioprocess Control and Instrumentation. 2. Molecular Modelling and Drug Design. 3. Bio-nanotechnology	Yes		
Open Elective	1. Business Analytics 2. Industrial Safety 3. Operations Research 4. Cost Management of Engineering Projects 5. Composite Materials 6. Waste to Energy			
Dissertation	Dissertation Phase-I / Industrial Project (To be continued and Evaluated next Semester)*			yes
	Total	1		1

Program Code: 03   Program Name: M.Tech – Biotechnology   Year: 2   Semester: 4

Course code	Course name	Employability (Yes/No)	Entrepreneurship (Yes/No)	Skill development (Yes/No)
Dissertation	Dissertation Phase II (Continued from III semester)			yes
	Total			1

Coordinator

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