



ANNAMACHARYA UNIVERSITY

(ESTD UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)

RAJAMPET, Annamayya District, AP – 516126, INDIA

SPECIALIZATIONS AND DOMAINS

Date: 02.04.2025

SNo.	Department	Specialization	Domain Expertise to guide research scholars
1	CIVIL	Geo-Technical Engineering	Foundation Engineering
			Soil Mechanics and Ground Improvement
			Earthquake Geotechnical Engineering
			Slope Stability and Landslide Engineering
			Geo-environmental Engineering
			Pavement Geotechnics
			Offshore and Marine Geotechnics
			Underground and Tunnelling Engineering
		Structural Engineering	Advanced Concrete Technology
			Structural Dynamics and Earthquake Engineering
			Bridge Engineering
			Tall and Special Structures
			Structural Rehabilitation and Retrofitting
			Finite Element Analysis (FEA) and Computational Mechanics
			Precast and Prefabricated Structures
			Performance-Based Structural Engineering
			Sustainable and Smart Structures
			Offshore and Marine Structures
		Hydraulics and Water Resources	Hydrological Modelling and Watershed Management
			River Engineering and Sediment Transport
			Groundwater Hydrology and Management
			Hydraulic Structures and Dam Engineering
			Water Resources Planning and Management
			Climate Change Impact on Water Resources
			Irrigation and Drainage Engineering
			Coastal and Offshore Hydraulics
			Computational Fluid Dynamics (CFD) in Hydraulic Engineering
			Urban Water Systems and Smart Water Technologies
		Environmental Engineering	Water and Wastewater Treatment
			Air Pollution and Control Technologies
			Solid and Hazardous Waste Management
			Environmental Impact Assessment (EIA) and Sustainability
			Groundwater Contamination and Remediation

			Climate Change and Its Impact on Civil Infrastructure
			Urban Water Management and Smart Cities
			Renewable Energy and Environmental Sustainability
			Noise Pollution and Environmental Acoustics
			Industrial and Agricultural Pollution Control
2	EEE	Power Systems	Smart grid
			Energy management
			Renewable Energy Integration
			Soft computing Techniques
			Microgrid, Evolutionary Algorithms
			Power System protection
			Power System Security
			IOT applications in Power systems
			AI & ML and IoT
			Power System Deregulation
			Fuzzy Logic applications in power system
		Power System protection	
		Power Electronics	Electrical Vehicles
			Power system operation and control
FACTS and HVDC			
Optimization Techniques			
DC-DC Converters			
Multilevel Inverters			
Drives			
3	MECH	CAD/CAM and Manufacturing Engineering	Applications of Optimization Techniques in Manufacturing
			Composite materials for manufacturing
			Scheduling and Soft Computing
			Flexible manufacturing systems
			Reconfigurable Manufacturing systems
		Machine Design	Composite Materials
			Composite Structures
		Thermal Engineering	Alternative fuels
			IC Engines
			CFD analysis
			PCM materials
			Energy Conservation and storage systems
		4	ECE
Ad hoc Networks			
Antenna Design			
5G/6G Technologies			
Secured Communications			
Signal and Image Processing	Biomedical Image Processing		
	Image Processing applications		
	Signal Processing applications		

		VLSI System Design	Remote Sensing
			Video Analysis
			VLSI Architecture
			Cryptographic Hardware
			ASIC/FPGA Design
		Embedded Systems	Low Power VLSI
			Quantum Physics
			Internet of Things
			AI in Embedded Systems
			Edge Computing
5	CSE	CSE	Robotics and Cybersecurity
			Tiny ML
			Artificial Intelligence
			Block Chain Technology
			Cloud Computing and Distributed Systems
			Computer Networks and Wireless Communications
			Computer Vision
			Computational Intelligence
			Cyber Security and Cryptography
			Data Science and Big Data Analytics
			High Performance Computing
			Internet of Things and Edge Computing
			Machine Learning
			Programming Languages and System Software
Quantum Computing			
Software Engineering			
6	Humanities and Sciences (ENGLISH)	English Language and Literature	American Literature
			British Literature
			Comparative Literature
			Cultural Studies
			Diasporic Literature
			English Language Teaching
			Indian English Literature
	Humanities and Sciences (CHEMISTRY)	Chemistry	Polymer Chemistry
			Heat and Mass Transfer
	Humanities and Sciences (MATHEMATICS)	Mathematics	Fluid Dynamics
			Computational Fluid Dynamics
			Material Science
	Humanities and Sciences (PHYSICS)	Physics	Photonics
Atmospheric Science			
Behavioural Finance			
7	MBA	Finance	Equity Research
			Finance in Technology
			Mutual funds

			Digital Finance
			Bank Management
		Human Resource	Work life Balance
			Employee Engagement
			Employee performance Management
			Organizational culture and change
			Artificial Intelligence and Hr Analytics
			Strategic Leadership
		Marketing	Customer Relationship Management
			Services Marketing
Brand Management			
Retail Marketing			
8	MCA	Computer Science	Artificial Intelligence
			Machine Learning
			Software Engineering
			Computer Networks
			Internet of Things
9	EDUCATION	Education	Education
10	AGRICULTURE	Genetics & Plant Breeding	Wide Hybridization
			Breeding & Molecular Biology (Seed Improvement)
			Tissue Culture
		Soil Science & Agricultural Chemistry	Soil Fertility and Plant Nutrition
Plant Physiology	Salinity & Water stress		

REGISTRAR