HARCOURT BUTLER TECHNICAL UNIVERSITY

Recruitment Rules (Direct Recruitment) for Faculty Positions (Assistant Professor, Associate Professor and Professor) in Mechanical Engineering

Name of the Post	Essential Qualification and Experience	Relevant Discipline (UG)	Relevant Discipline (PG)
Assistant Professor (Level – 10, Entry Pay 57700/-)	B. E. / B. Tech. / B. S. and M. E. / M. Tech. / M. S. or Integrated M. Tech. in relevant branch with first class or equivalent in any one of the degrees	 Mechanical Engineering Electrical and Mechanical Engineering Mechanical Engg. (Industry Integrated) Mechanical Engg (Sandwich Pattern) Mechanical Engineering (Repair and Maintenance) Power Engineering Industrial and Production Engineering Machine Engineering Manufacturing Engineering Manufacturing Engineering & Automation Manufacturing Process & Automation Engineering Manufacturing Process & Automation Engineering Manufacturing Science and Engineering Manufacturing Technology Mechanical Engineering (Production) Precision Manufacturing Production and Industrial Engineering Production Engineering Production Engineering Production Engineering Automobile Engineering Automobile Maintenance Engineering Automobile Engineering Automobile Industrial Engineering Automobile Industrial Engineering Industrial Engineering Mechanical Engineering Industrial Engineering Industrial Engineering Industrial Engineering Mecharonics Engineering Mechatronics Engineering Mechatronics Engineering Mechatronics Engineering Mechatronics Engineering Mechatronics Engineering 	Advanced Computer aided Design Advanced Design and Manufacturing Advanced Manufacturing and Mechanical Systems Design Advanced Manufacturing Systems Advanced Manufacturing Technology Advanced Materials Technology Advanced Production Systems Automated Manufacturing Systems Automobile Engineering Automobile Technology Automobile Technology Automotive Electronics Automotive Electronics Automotive Systems Automotive Systems Automotive Systems Automotive Technology CAD / CAM CAD/CAM Engineering CAD/CAM/CAE Combat Vehicles (Mechanical Engineering) Computational Analysis In Mechanical Science Computational Mechanics (Mechanical Engineering) Computer Aided Analysis and Design Computer Aided Process Design Manufacture and Engineering Computer Aided Process Design Computer Aided Process Design Computer Aided Process Design Manufacturing Computer Integrated Manufacturing Computer Integrated Manufacturing Design and Production Design and Production Design and Production Design and Production Design Engineering Design Engineering Design For Manufacturing Design of Mechanical Equipment

	Design of Mechanical
	SystemsEngineering Design
	 Engineering Design Fracture Mechanics
	 Food Supply Chain
	Management
	Fuel and CombustionGas Turbine Technology
	Heat and Power
	 Heat Power and Thermal
	EngineeringHeat Power Engineering
	 Heat Ventilation and Air
	Conditioning
	Industrial and Production Engineering
	EngineeringIndustrial Design
	 Industrial Engineering
	• Industrial Engineering and
	ManagementIndustrial Production and
	Management Engineering
	 Industrial Refrigeration and
	CryogenicsInternal Combustion and
	Automobiles
	 Internal Combustion
	Engines and Turbo machinery
	Internal Combustion
	Engineering
	Lean Manufacturing Engineering
	EngineeringMachine Design
	 Machine Design and
	Robotics Maintenance Engineering
	Maintenance EngineeringManufacturing and
	Automation
	Manufacturing Engineering
	 Manufacturing Engineering
	andAutomation
	 Manufacturing Engineering
	and Management
	 Manufacturing Engineering and Technology
	 Manufacturing Process
	Manufacturing Process & Automotion Engineering
	Automation EngineeringManufacturing Science
	and Engineering
	 Manufacturing Systems
	and ManagementManufacturing Systems
	Engineering Manufacturing
	Technology
	 Manufacturing Technology & Automation
	 Material Engineering
	 Material Science and
	TechnologyMechanical (Computer
	Aided Design, Manufacture
	& Engineering)

	 Mechanical (Computer Integrated Manufacturing) Mechanical and Automation Engineering Mechanical Engg. (Manufacturing Technology) Mechanical Engineering Mechanical Engineering (CAD/CAM) Mechanical Engineering (Energy System and Management) Mechanical Engineering (Industry Integrated) Mechanical Engineering (Thermal Engg.) Mechanical Engineering Automobile Mechanical Engineering Design Mechanical Engineering Specialization in CAD Mechanical Engineering (Production) Mechanical Engineering-Product Design and Development Mechanical-Product Life Cycle Management Mechanical System Design Mechanical Welding and Sheet Metal Engineering Mechanical-Manufacturing Engineering Mechanical-Manufacturing Engineering Power and Energy Engineering Power Engineering Power Engineering and Energy Systems Power Plant Engineering Power Plant Engineering Product Design and Commerce Product Design and Development Product Design and Manufacturing Product Design and Development Production Engineering
	 Energy Systems Power Plant Engineering & Energy Management Product Design Product Design and Commerce Product Design and Development Product Design and Manufacturing
	Industrial Engineering

			 Management Refrigeration & Air Conditioning Reliability Engineering Robotics and Mechatronics Rocket Propulsion Solar Power Systems Thermal and Fluid Engineering Thermal Engineering Thermal Engineering Thermal Science Thermal Science Engineering Thermal Sciences & Energy Systems Thermal Systems and Design Tool design Tool Engineering Tribology and Maintenance Turbo Machinery Virtual Prototyping & Digital M anufacturing Applied Mechanics Metallurgical Engineering Metallurgy Industrial Metallurgy Hydropower Energy Hydropower Robotics and Automation Stress & Vibration Analysis Fluidics Energy Production Process and Machine Equipment Energy & Environment Process Metallurgy Metallurgical and Material Engineering Material Science & Engineering Foundry Steel Technology
Associate Professor (Level – 13A1, Entry Pay 131400/-)	a. B. E. / B. Tech. / B. S. and M. E. / M. Tech. / M. S. or Integrated M. Tech. in relevant branch with first class or equivalent in any one of the degrees AND b. Ph.D. degree in the relevant field AND c. At least total 6 research publications in SCI journals	 Mechanical Engineering Electrical and Mechanical Engineering Mechanical Engg (Industry Integrated) Mechanical Engg (Sandwich Pattern) Mechanical Engineering (Repair and Maintenance) Power Engineering Industrial and Production Engineering Machine Engineering 	 Advanced Computer aided Design Advanced Design and Manufacturing Advanced Manufacturing and Mechanical Systems Design Advanced Manufacturing Systems Advanced Manufacturing Technology Advanced Materials Technology

/ UGC / AICTE approved list of journals.

AND

d. Minimum of 8 years of experience in teaching / research / industry out of which at least 2 years shall be Post Ph.D. experience

- Manufacturing Engineering
- Manufacturing Engineering & Automation
- Manufacturing Engineering and Technology
- Manufacturing Process & Automation Engineering
- Manufacturing Science and Engineering
- Manufacturing Technology
- Mechanical Engineering (Production)
- Precision Manufacturing
- Production and Industrial Engineering
- Production Engineering
- Production Engineering (Sandwich)
- Tool Engineering
- Automobile Engineering
- Automobile Maintenance Engineering
- Automotive Technology
- Mechanical Engineering (Auto)
- Mechanical Engineering Automobile
- . Industrial and Production Engineering
- Industrial Engineering
- Industrial Engineering and Management
- Mechanical and Automation Engineering
- Mechatronics
- Mechatronics Engineering Mechatronics Engineering (sandwich)

- Advanced Production
 Systems
- Automated Manufacturing Systems
- Automobile Engineering
- Automobile Technology
- Automotive Electronics
- Automotive Engineering
- Automotive Systems
- Automotive Technology
- CAD / CAM
- CAD/CAM Engineering
- CAD/CAM/CAE
- Combat Vehicles (Mechanical Engineering)
- Computational Analysis In Mechanical Science
- Computational Mechanics
- Computational Mechanics (Mechanical Engineering)
- Computer Aided Analysis and Design
- Computer Aided Design
- Computer Aided Design and Manufacture
- Computer Aided Design
- Manufacture and Automation
- Computer Aided
 Design Manufacture
 and Engineering
- Computer Aided Process Design
- Computer Integrated Manufacturing
- Cryogenic Engineering
- Design and Production
- Design and Thermal Engineering
- Design Engineering
- Design for Manufacturing
- Design of Mechanical Equipment
- Design of Mechanical Systems
- Engineering Design
- Fracture Mechanics
- Food Supply Chain Management
- Fuel and Combustion
- Gas Turbine Technology
- Heat and Power
- Heat Power and Thermal Engineering
- Heat Power Engineering
- Heat Ventilation and Air Conditioning
- Industrial and Production Engineering
- Industrial Design
- Industrial Engineering
- Industrial Engineering and Management
- Industrial Production and Management Engineering
 Industrial Refrigeration and

Cryogenics
Internal Combustion and
Automobiles
Internal Combustion Engines and Turbo
machinery
Internal Combustion
Engineering
Lean Manufacturing
Engineering • Machine Design
Machine Design Machine Design and
Robotics
Maintenance Engineering
Manufacturing and
Automation • Manufacturing Engineering
Manufacturing Engineering Manufacturing
Engineering
and
Automation
Manufacturing Engineering
and Management Manufacturing Engineering
Manufacturing Engineering and Technology
Manufacturing Process
Manufacturing Process &
Automation Engineering
Manufacturing Science and Engineering
and EngineeringManufacturing Systems
and Management
Manufacturing Systems
Engineering Manufacturing
Technology • Manufacturing Technology
& Automation
Material Engineering
Material Science and Technology
Technology • Mechanical (Computer
Aided Design, Manufacture
& Engineering)
Mechanical (Computer Interpretable of the second of
Integrated Manufacturing) • Mechanical and Automation
Engineering
Mechanical Engg.
(Manufacturing Technology)
 Mechanical Engineering Mechanical Engineering
(CAD/CAM)
Mechanical Engineering
(Energy System
and Management)Mechanical Engineering
(Industry Integrated)
Mechanical Engineering
(Thermal Engg)
Mechanical Engineering
Automobile Machanical Engineering
Mechanical Engineering Design
Mechanical Engineering
Specialization in CAD
Mechanical Engineering

	(Production)
	 Mechanical Engineering-
	Product Design and
	Development
	 Mechanical- Product Life
	Cycle Management
	Mechanical System Design Machanical Wolding and
	 Mechanical Welding and Sheet Metal Engineering
	Mechanical Manufacturing
	Engineering
	 Mechatronics
	 Power and Energy
	Engineering
	Power EngineeringPower Engineering and
	Energy Systems
	 Power Plant Engineering
	& Energy Management
	Product Design
	Product Design and Commence
	CommerceProduct Design and
	Development
	 Product Design and
	Manufacturing
	 Production and
	Industrial Engineering
	Production Engineering
	Production Engineering And Engineering Design
	and Engineering DesignProduction Engineering
	System Technology
	 Production Management
	 Production Technology
	 Production Technology
	and Management
	Project ManagementPropulsion Engineering
	Quality Engineering and
	 Management
	Refrigeration & air
	Conditioning
	Reliability Engineering
	 Robotics and Mechatronics
	Rocket Propulsion Solar Power Systems
	Solar Power SystemsThermal and Fluid
	Engineering
	 Thermal Engineering
	 Thermal Power Engineering
	• Thermal Science
	 Thermal Science Engineering
	 Thermal Sciences & Energy
	Systems
	 Thermal Systems and
	Design
	Tool designTool Engineering
	Tool EngineeringTribology and
	Maintenance
	 Turbo Machinery
	 Virtual Prototyping &
	Digital Manufacturing.
	 Applied Mechanics

			 Metallurgical Engineering Metallurgy Industrial Metallurgy Hydropower Energy Hydropower Engineering Hydropower Robotics and Automation Stress & Vibration Analysis Fluidics Energy Production Process and Machine Equipment Engineering Systems Energy & Environment Process Metallurgy Metallurgical and Material Engineering Material Science & Engineering Foundry Foundry Foundry Technology Steel Technology
Professor (Level – 14, Entry Pay 144200/-)	a. B. E. / B. Tech. / B. S. and M. E. / M. Tech. / M. S. or Integrated M. Tech. in relevant branch with first class or equivalent in any one of the degrees AND b. Ph.D. degree in the relevant field AND c. Minimum of 10 years of experience in teaching / research / industry out of which at least 3 years shall be at a post equivalent to that of an Associate Professor. AND d. At least 6 research publications at the level of Associate Professor in SCI journals / UGC / AICTE approved list of journals and at least 2 successful Ph.D. guided as Supervisor / Co- supervisor till the date of eligibility OR At least 10 research publications at the level of Associate Professor in SCI journals / UGC / AICTE approved list of journals till the date of eligibility of promotion.	 Mechanical Engineering Electrical and Mechanical Engineering Mechanical Engg (Industry Integrated) Mechanical Engg (Sandwich Pattern) Mechanical Engineering (Repair and Maintenance) Power Engineering Industrial and Production Engineering Machine Engineering Manufacturing Engineering Manufacturing Engineering & Automation Manufacturing Engineering and Technology Manufacturing Process & Automation Engineering Manufacturing Science and Engineering Manufacturing Science and Engineering Production) Precision Manufacturing Technology Mechanical Engineering (Production) Precision Manufacturing Production Engineering Production Engineering Production Engineering Production Engineering Production Engineering Automobile Engineering Automobile Engineering Automobile Maintenance Engineering 	 Advanced Computer aided Design Advanced Design and Manufacturing Advanced Manufacturing and Mechanical Systems Design Advanced Manufacturing Systems Advanced Manufacturing Technology Advanced Materials Technology Advanced Production Systems Automated Manufacturing Systems Automobile Engineering Automobile Technology Automotive Electronics Automotive Engineering Automotive Technology CAD / CAM CAD / CAM CAD/CAM Engineering CAD/CAM/CAE Combat Vehicles (Mechanical Engineering) Computational Analysis In Mechanical Science Computational Mechanics (Mechanical Engineering) Computational Mechanics (Mechanical Engineering) Computational Mechanics (Mechanical Engineering) Computer Aided Analysis and Design Computer Aided Design

Automotive Technology Manufacture and Mechanical Engineering Automation (Auto) Computer Aided Mechanical Engineering Design Manufacture Automobile and Engineering . Industrial and Production Computer Aided Process Engineering Design Industrial Engineering Computer Integrated **Industrial Engineering** Manufacturing and Management Cryogenic Engineering Mechanical and Design and Production Automation Engineering Design and Thermal Mechatronics Engineering Mechatronics Engineering Design Engineering **Mechatronics Engineering** Design for Manufacturing (Sandwich) Design of Mechanical Equipment Design of Mechanical Systems Engineering Design Fracture Mechanics Food Supply Chain Management Fuel and Combustion Gas Turbine Technology Heat and Power Heat Power and Thermal Engineering Heat Power Engineering Heat Ventilation and Air Conditioning **Industrial and Production** Engineering Industrial Design Industrial Engineering Industrial Engineering and Management Industrial Production and Management Engineering Industrial Refrigeration and Cryogenics Internal Combustion and Automobiles **Internal Combustion Engines and Turbo** machinery **Internal Combustion** Engineering\ Lean Manufacturing Engineering Machine Design Machine Design and **Robotics** Maintenance Engineering Manufacturing and Automation Manufacturing Engineering Manufacturing Engineering and automation Manufacturing Engineering and Management Manufacturing Engineering and Technology Manufacturing Process Manufacturing Process &

	Automation Engineering
	Manufacturing Science
	and Engineering
	Manufacturing Systems
	and Management
	Manufacturing Systems Engineering Manufacturing
	Engineering Manufacturing Technology
	Manufacturing Technology
	& Automation
	 Material Engineering
	 Material Science and
	Technology
	Mechanical (computer Aid a Decision Mesons and a decision)
	Aided Design, Manufacture
	& engineering) • Mechanical (Computer
	Integrated Manufacturing)
	Mechanical and Automation
	Engineering
	Mechanical Engg.
	(Manufacturing Technology)
	Mechanical Engineering Mechanical Engineering
	 Mechanical Engineering (CAD/CAM)
	Mechanical Engineering
	(Energy System
	and Management)
	 Mechanical Engineering
	(Industry Integrated)
	 Mechanical Engineering
	(Thermal Engg.)
	Mechanical Engineering
	Automobile Machanical Engineering
	 Mechanical Engineering Design
	Mechanical Engineering
	Specialization in CAD
	 Mechanical Engineering
	(Production)
	Mechanical Engineering-
	Product Design and
	Development
	Mechanical- Product Life Cycle Management
	Cycle Management
	Mechanical System DesignMechanical Welding and
	Sheet Metal Engineering
	Mechanical Manufacturing
	Engineering
	 Mechatronics
	Power and Energy Engineering
	Engineering Power Engineering
	Power EngineeringPower Engineering and
	Energy Systems
	 Power Plant Engineering
	& Energy Management
	 Product Design
	 Product Design and
	Commerce
	Product Design and
	Development
	Product Design and Manufacturing
	ManufacturingProduction and
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General Conditions

- a) B.E. / B.Tech. / B.Sc. (Engineering)/B.S. (4 years) shall be considered equivalent
- b) Candidates with AMIE/IETE qualifications in relevant branches will be treated as equivalent to B.E./ B.Tech. / B.Sc. (Engineering)/B.S. (4 years).
- c) M.E./M. Tech / M.Sc (Engineering)/M.S. shall be considered equivalent
- d) In institutions /universities where a division/class is not awarded, the candidate shall have to submit the relevant conversion formulae for proof of first division from their respective universities/institutes. If a division/class is not awarded, a minimum of 60% marks in aggregate shall be considered equivalent of first class/division. If a Grade Point System is adopted the CGPA will be converted into equivalent marks as per the Table given below:

Grade point	Equivalent Percentage
6.25	55
6.75	60
7.25	65
7.75	70
8.25	75

- e) The candidates who have done their Ph.D directly after B.Tech (without doing M.Tech or equivalent) shall be eligible for faculty positions, provided the degree of Ph. D awarded is in a relevant discipline by a recognized University following the process of registration, course work and evaluation etc. as prescribed by UGC or has been awarded by the Institutes of national importance (i.e. IITs/IISc/NITs etc.), duly recognized by the MoE. Further, the candidate should have obtained at least first class at Bachelor's level in Engineering /Technology.
- f) The screening of applications shall be done based on the candidate's API calculated as per prescribed guidelines
- g) For the post of Assistant Professor, there will be a written test in the Mechanical Engineering discipline. The screening of applicants for the post of Assistant Professor shall be done on the basis of their combined API and the score in the written test.
- h) Reservation for SC/ST/OBC/PH/EWS shall as per the UP-state government rules.
- i) In case of exceptional merit, the Selection Committee may recommend a maximum of 03 additional increments for higher qualifications, experience and achievements by the candidates
- i) Persons already in employment should apply through proper channel.