

JOB INFORMATION

Effective Date	3/19/2024
Job Code:	2342
Job Title:	Mechanical Engineering and Machine Shop Technician
Salary Grade/Structure:	200 - Support Staff
Career Level Name:	
FLSA Name:	Non-Exempt
EEO Code:	50-Technical and Paraprofessional
Job Function:	Facilities
Job Family:	Facilities
Job Summary	The Mechanical Engineering and Machine Shop Technician is responsible for developing and implementing shop and Mechanical Engineering laboratory safety standards and procedures in accordance with established university policies.

COMPETENCIES

Competencies

Please refer to the [UHCL Human Resources webpage](#) for UHCL core competencies for all eligible job levels.

QUALIFICATIONS

Education

Education Level	Education Details	Required/Preferred	
Associate's Degree	in Applied Science Degree in Machining, Manufacturing Engineering Technology or Related Field	Required	or
High School Diploma or GED	An Equivalent Combination of education and experience from which comparable skills and knowledge have been achieved	Required	
Bachelor's Degree	in Machining, Manufacturing Engineering Technology or Related Field	Preferred	

Work Experience

Experience	Experience Details	Required/Preferred	
Some	Minimum of three years of experience in all, or most, of the following: General Machine Shop Tools and Tooling, Machine Shop and Laboratory Safety Practices, Welding Operations, Sheet Metal Fabrication and Precision Machining.	Required	
Less than 3 yrs	Experience with Lathe and Mill (traditional and CNC), Haas CNC experience	Preferred	
Less than 3 yrs	Experience with 3D printing and laser engraving processes	Preferred	
Less than 3 yrs	Experience with University Faculty and Students in an Educational and Research oriented environment	Preferred	

Licenses and Certifications

Licenses/Certifications	Licenses/Certification Details	Time Frame	Required/ Preferred	
	Level 2 Technologist Certificate		Preferred	

Knowledge, Skills and Abilities

KSAs	Proficiency
• Must be organized, detailed oriented, and able to think designs through completely.	Skilled
• Excellent written, verbal, and interpersonal communication skills.	Skilled
• Proficient in standard and metrics systems.	Skilled
• Familiarity with machine shop equipment (e.g. mill machine, drill press, lathe, etc.).	Skilled
• Ability to use a full range of conventional tools.	Skilled
• Ability to read/understand mechanical drawings and schematics and do redlines.	Skilled
• Ability to work independently with minimal supervision and work as part of a team.	Skilled
• Must be a creative thinker, results oriented, focused, and attentive to detail and accuracy.	Skilled

JOB RESPONSIBILITIES

Campus Security Authority

Remote Work Capable

Essential Functions

Essential Function	% TIME
• Fabricate testing samples for educational laboratory experiments.	30%
• Assist Faculty with Machine Shop and Mechanical Testing Laboratory instruction.	30%
• Enter purchasing requisitions for machine oriented materials and equipment.	10%
• Assist Students and Faculty with Academic and Research projects requiring Manufacturing, Fabrication or Assembly skills.	25%
• Performs All Other Duties As Assigned	5%

PRE-EMPLOYMENT

MVR:	No
Criminal History:	Yes
Physical Exam:	No
Hearing Exam:	No
Pulmonary Function Test:	No

PHYSICAL DEMANDS/WORKING CONDITIONS

Physical Demands

Physical Demand	N/A	Rarely	Occasionally	Frequently	Constantly	Weight
Standing						
Walking						
Sitting						
Lifting						

Physical Demands

Physical Demand	N/A	Rarely	Occasionally	Frequently	Constantly	Weight
Carrying						
Pushing						
Pulling						
Climbing						
Balancing						
Stooping						
Kneeling						
Crouching						
Crawling						
Reaching						
Handling						
Grasping						
Feeling						
Talking						
Hearing						
Repetitive Motions						
Eye/Hand/Foot Coordination						

Working Environment

Working Condition	N/A	Rarely	Occasionally	Frequently	Constantly
Extreme cold					
Extreme heat					
Humid					
Wet					
Noise					
Hazards					
Temperature Change					
Atmospheric Conditions					
Vibration					

Travel Requirements

Estimated Amount	Brief Description