

Jackson State University  
Department of Technology  
College of Science, Engineering  
& Technology  
Jackson, MS 39217  
P.O. Box 18480  
1400 JR Lynch St.  
Phone: (601) 979-2489

#### Manufacturing & Design Technology Mission Statement

The mission of the Manufacturing and Design Technology (MDT) is to train competitive technologists and applied engineering workforce dedicated to solving complex technological problems. The goal of the MDT concentration is to prepare students resourceful and technically competent to interface between engineering and other personnel within the manufacturing environment. The program is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE) which sets standards for academic program accreditation, personal certification, and professional development for educators and industry professionals.

#### For any queries feel free to contact

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Manufacturing and Design Technology  
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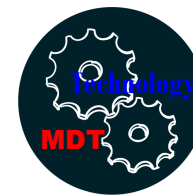
## Manufacturing & Design Technology Department of Technology College of Science, Engineering & Technology Jackson State University



#### DEPARTMENTAL MISSION STATEMENT:

The mission of the Department of Technology is to provide a nationally accredited program, which serves the technical, managerial, and communication needs of persons desiring to enter or advance professionally in an industrial technology related career. The JSU Technology Program will:

- \* Prepare our graduates to meet employer expectations for competent professional, and ethical practice.
- \* Prepare our graduates to pursue advanced studies in the areas of technology or other fields.
- \* Prepare our graduates to adopt and continuously practice life-long learning and continuing education



## Undergraduate program in Manufacturing & Design

The Manufacturing & Design Technology (MDT) option is designed to provide students with both theoretical knowledge and practical skills in manufacturing systems that are essential in the 21st century. The curriculum emphasizes on manufacturing fundamentals, 2D/3D drawing and drafting, quality control, fluid power, programmable logic controllers (PLC), computer numerical control (CNC), and computer integrated manufacturing (CIM). Plant layout, industrial safety, labor & industrial relation equip MDT graduates with managerial



Jackson State University has a distinguished history, rich in the tradition of educating young men and women for leadership, having undergone seven name changes as it grew and developed. It's officially designated the Urban University of the State of Mississippi. Presently, Jackson State University, a public, coeducational institution, is supported by legislative appropriations supplemented by student fees and federal and private grants.



competencies for



## ADMISSION TO THE UNIVERSITY

Admission to Jackson State University is administered in accordance with the policies established by the Board of Trustees, State of Mississippi Institutions of Higher Learning and by the Jackson State University Admissions and Credits Committee.

Admission decisions are made as applications and supporting documents are received; therefore, early application is encouraged. Information submitted to Jackson State University must be true and accurate. The withholding of pertinent information or the submission of false information may result in denial of admission or in dismissal. The University reserves the right to deny admission to any applicant and to forbid any previously admitted student continued enrollment. Jackson State complies with all applicable laws regarding affirmative action and equal opportunity in all its activities and programs and does not discriminate against anyone protected by law because of age, color, national origin, race, religion, sex, handicap, or veteran status. The University welcomes applications from all individuals whose preparation and abilities give them a reasonable chance of success in programs offered by the University. Questions regarding admission should be direct to the: Office of Undergraduate Admissions, JSU Box 17330, Jackson State University, Jackson, Mississippi 39217.

## FRESHMAN ADMISSION PROCEDURES & REQUIREMENTS

**How To Apply-** To apply for freshman admission, an applicant must submit to the Office of Undergraduate Admissions the following:

1. **APPLICATION** – A completed application
2. **TRANSCRIPTS** – Prospective students should request their high school to send to the Office of Undergraduate Admissions an official six- or seven-semester transcript, which lists all high school course work, the date of graduation, grade point average, and class rank. Unofficial transcripts are not accepted from students. .
3. **TEST SCORES** – Official ACT or SAT scores for all applicants finishing high school within the past five years are mailed to the Office of Undergraduate Admissions listed on the transcript: directly from the ACT or SAT headquarters upon request (see addresses listed in this section). Score reports brought by the applicant are not considered official. American College Testing Program , Box 268 Iowa City, Iowa 52240, (310) 356-3711 x 592, Prin9023
4. **COMPLETE STUDENT HEALTH FORM** – All students born after December 1957 must submit proof of immunization compliance for measles and rubella.

**Regular admission will be granted to the following:**

- All students completing the Collegeceton, New Jersey 08540, (609) 921- Preparatory Curriculum (CPC) with a minimum of a 3.20 high school GPA on the CPC.
- All students completing the College Preparatory Curriculum (CPC) with (a) minimum of a 2.50 high school GPA on the CPC or a class rank in the top 50%, and (b) a score of 16 or higher on the ACT (or the SAT equivalent).
- All students completing the College Preparatory Curriculum (CPC) with (a) minimum of a 2.00 high school GPA on the CPC, and (b) a score of 18 or higher on the ACT (or SAT equivalent).



## Department of Technology

### Bachelor of Science in Industrial Technology with Manufacturing & Design Technology concentration

Freshman Year		Fall	Spring
GUID 100	Concepts of Success in College	2	-
Math 111	College Algebra	3	-
FL	Foreign Language	3	-
HIST 101,102	History of Civilization	3	3
Eng 104,105	Composition and Literature	3	3
PE	Any 100-Level Activity Options	1	1
Math 112	Plane Trigonometry	-	3
CHEM 141	General Chemistry	-	3
CHML 141	General Chemistry Lab	-	1
CSC 115	Digital Computer Principles	-	3
Freshman Year Total - 32 Hours		15	17
Sophomore Year			
IT 100	Introduction to Technology	1	-
ITD 114	Computer Aided Drafting	3	-
ITMA 105	Industrial Safety Management	3	-
PHY 201	Physics I	3	-
PHYL 201	Physics Lab I	1	-
ITMF 206	Intro. Manufacturing Processes	3	-
ENG 205	World Literature	3	-
SPCH 201	Speech Art	-	3
ITD 203	Advanced CAD	-	3
ENG 206	Professional Writing	-	3
MATH 221	Calculus I Industrial or Business	-	3
ELEC	Elective	-	3
Sophomore Year Total -32 Hours		17	15
Junior Year			
ITD 327	Machine Design	3	-
ITMF 399	Materials Testing	3	-
ITMA 325	Industrial Psychology	3	-
ART 206	Art Appreciation	3	-
ECO 211	Principles of Economics	3	-
MNGT 250	Business Computer Application	-	3
ITMF 340	Hydraulics & Fluid Power	-	3
IT 300	Internship/Industrial Experience	-	3
PHIL 301	Introduction to Philosophy	-	3
ELEC	Elective	-	3
Junior Year Total-30 Hours		15	15
Senior Year			
ITC 400	Technical Writing	3	-
ITMF 410	Computer Numerical Control	3	-
ITMF 425	Robotics	3	-
ITE 438	Programmable Logic Controllers	3	-
ITMA 423	Motion & Time Study	3	-
ITMF 420	Adv. Manufacturing Technology	-	3
ITMA 410	First Line Supervision	-	3
ITMA 420	Labor & Industrial Relation	-	3
ITMA 425	Plant Layout & Material Handling	-	3
IT 490	Senior Capstone	-	3
Senior Year Total-30 Hours		15	15
TOTAL HOURS - 124			

## UNIVERSITY SCHOLARSHIP PROGRAM

Scholarship and achievement grants are awarded to deserving students based on scholastic merit and financial need. Scholarships and achievement grants are offered as an integral part of the recipient's total financial aid package. Policies concerning scholarships and achievement grants are determined by the Scholarship Committee. The amount of each award is determined by the scholarship or grant category. These awards shall not exceed the "cost of attendance" at the University. For individual students with scholarships from multiple sources; awards from sources shall be applied to the student's "Financial Aid Budget" first and the institutional awards) shall be applied last. This policy shall not supersede any Federal, State, NCAA, or Athletic conference regulations. Application for academic scholarships may be requested from:

### Office of Enrollment Management

Phone-601-979-8637

### Undergraduate Recruitment

Phone-601-979-5845

**More about Manufacturing and Design Technologists**—Almost everything we touch in daily life is designed and manufactured. The Manufacturing & Design Technologists (MDTs) have the vital task of solving society's innovation and production tasks. Entry level MDTs are involved in acquiring raw materials to the efficient management of resources and technology to produce quality goods and services for society. A key role for MDTs is to develop more innovative products resulting in a high value-added manufacturing industry. Manufacturing and Design Technology students are strongly encouraged to participate in cooperative education assignments and internships with well-respected industrial manufacturers. Qualified students gain valuable on-the-job experience while earning money to offset educational expenses.

## Manufacturing & Design Technology Careers

The Manufacturing and Design Technology (MDT) concentration students graduates from JSU with technical, operational, and managerial competencies to meet the needs of manufacturing industry. The wide breadth of technical positions in the industry ensures the MDT graduate an interesting and challenging career. Students are trained to become resourceful, technically competent people who can interface between engineering and other personnel within the manufacturing environment. This program provides practical knowledge of manufacturing processes, the ability to apply the processes, and the ability to plan, coordinate and implement aspects of production projects. Examples of positions held by MDT graduates include: Manufacturing Engineer, Process Engineer, Operations Manager, Industrial Engineer II, Quality Assurance Managers, Plant Managers, Project Managers, Line Supervisors, Project Engineer, Production Management and Control Managers, Quality Control Manager, Maintenance Managers, Manufacturing Technologists, and Production Planning Analysts. Our research found that current job openings, as of April, 2008, for manufacturing technologists were offering annual salaries of \$42,000 to \$70,000 depending on experience and education.