

# BS IN MECHANICAL ENGINEERING TECHNOLOGY

The mechanical engineering technology program emphasizes hands-on and problem-solving skills. Students learn how to model, design, develop, test, and supervise advanced mechanical systems and processes. We prepare students with the practical knowledge and skills to enter careers in automotive and manufacturing in general, automation and control, invention, and entrepreneurship.

Code	Title	Hours
ENGT 1000	Engineering Technology Orientation	1
MATH 1330	Trigonometry	3
MET 1020	Technical Drawing	3
MET 1050	Computers for Engineering Technology	3
MET 1110	Metal Machining And Processes	3
ENGL 1110	College Composition I	3
ENGT 2000	Professional Development	1
PHYS 2070	General Physics I	4
PHYS 2075	General Physics I - Lab	1
MET 1120	Metal Machining & Processes Lab	1
MET 1250	Computer Aided Drafting and Design	3
ENGL 2950	Technical Writing	3
PHYS 2080	General Physics II	4
PHYS 2085	General Physics II - Lab	1
MATH 2450	Calculus For Engineering Technology I	4
MET 2100	Statics For Technology	3
MET 2350	Advanced Computer Aided Drafting and Design	3
MET 2050	Fluid And Hydraulic Mechanics	4
MATH 2460	Calculus For Engineering Technology II	4
MET 2210	Technical Thermodynamics	4
MET 2120	Strength Of Materials For Technology	4
MET 3400	Applied Dynamics	3
COMM 2820	Group Communication	3
ENGT 3010	Applied Statistics And Design Of Experiments	4
ENGT 3020	Applied Engineering Mathematics	3
CHEM 1230	General Chemistry I	4
CHEM 1280	General Chemistry Lab I	1
MET 3200	Mechanical Design I	3
MET 3100	Applied Thermodynamics	4
MET 2310	Materials Science	3
MET 2320	Materials Science Laboratory	1
MET 4200	Mechanical Design II	3
MET 4100	Applied Fluid Mechanics	4
ENGT 3050	Fundamentals Of Electricity	4
ENGT 4050	Senior Technology Capstone	3
EET 4450	Automatic Control Systems	4
Professional Development Elective		3
Diversity US		3

Art/Humanities Core/Non-US Diversity	3
Art/Humanities Core	3
Social Science Core	6
Technical Elective	3

Below is a sample plan of study. Consult your degree audit for your program requirements.

First Term	Hours
ENGT 1000 Engineering Technology Orientation	1
MATH 1330 Trigonometry	3
MET 1020 Technical Drawing	3
MET 1050 Computers for Engineering Technology	3
MET 1110 Metal Machining And Processes	3
Arts/Humanities Core	3
<b>Hours</b>	<b>16</b>

Second Term	Hours
ENGL 1110 College Composition I	3
ENGT 2000 Professional Development	1
PHYS 2070 General Physics I	4
PHYS 2075 General Physics I - Lab	1
MET 1120 Metal Machining & Processes Lab	1
MET 1250 Computer Aided Drafting and Design	3
Social Sciences Core	3
<b>Hours</b>	<b>16</b>

Third Term	Hours
ENGL 2950 Technical Writing	3
PHYS 2080 General Physics II	4
PHYS 2085 General Physics II - Lab	1
MATH 2450 Calculus For Engineering Technology I	4
MET 2100 Statics For Technology	3
MET 2350 Advanced Computer Aided Drafting and Design	3
<b>Hours</b>	<b>18</b>

Fourth Term	Hours
MET 2050 Fluid And Hydraulic Mechanics	4
MATH 2460 Calculus For Engineering Technology II	4
MET 2210 Technical Thermodynamics	4
MET 2120 Strength Of Materials For Technology	4
<b>Hours</b>	<b>16</b>

Fifth Term	Hours
MET 3400 Applied Dynamics	3
COMM 2820 Group Communication	3
ENGT 3010 Applied Statistics And Design Of Experiments	4
ENGT 3020 Applied Engineering Mathematics	3
CHEM 1230 General Chemistry I	4
CHEM 1280 General Chemistry Lab I	1
<b>Hours</b>	<b>18</b>

Sixth Term	Hours
MET 3200 Mechanical Design I	3

MET 3100	Applied Thermodynamics	4
Technical Elective		3
MET 2310	Materials Science	3
MET 2320	Materials Science Laboratory	1
<b>Hours</b>		<b>14</b>
<b>Seventh Term</b>		
MET 4200	Mechanical Design II	3
Social Sciences Core		3
MET 4100	Applied Fluid Mechanics	4
ENGT 3050	Fundamentals Of Electricity	4
Diversity of US		3
<b>Hours</b>		<b>17</b>
<b>Eighth Term</b>		
ENGT 4050	Senior Technology Capstone	3
EET 4450	Automatic Control Systems	4
Professional Development Elective		3
Arts/Humanities Core/Non-US Diversity		3
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>128</b>

- PLO 1. an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- PLO 2. an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- PLO 3. an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- PLO 4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- PLO 5. an ability to function effectively as a member as well as a leader on technical teams.