

Bachelor of Science Manufacturing Engineering Technology - PLAN OF STUDY

Fall 2016 & Later

FALL

First Year

MATH102 Intermediate Algebra	4	1
EGME141 Solid Modeling	3	
ENGL110 First-Year Composition I	3	
EGNR101 Introduction to Engineering	2	
MATH207 Principles of Statistical Methods	3	
	15	

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ENGL111 First-Year Composition II	3	
MATH111 College Algebra	3	
MATH131 College Trigonometry	3	
EGME110 Manufacturing Processes I	3	
CHEM108 Applied Chemistry	3	
CHEM109 Applied Chemistry Lab	1	
	16	

Second Year

PHYS221 Elements of Physics I	4	
MATH112 ⁴ Calc. for Business and Life Science	4	
EGNR140 Lin. Algebra & Num. Methods for Eng.	2	
EGNR265 ⁴ "C" Programming	3	
EGET110 Applied Electricity ²	4	
	17	

EGME240 Assembly Modeling and GD&T	3	
Technical Elective		3
Or		
COMM101, 201, or 225		
EGET175 Applied Electronics ²	4	
EGEE125 Digital Fundamentals	4	
EGNR245 Calc. Applns for Techn. ²	3	
	17	

Third Year

EGMT225 Statics & Strength of Materials	4	
EGRS380 Robotics Technology	2	
EGRS381 Robotics Technology Lab	1	
EGNR310 Advanced Quality Engineering ²	3	
COMM101, 201, or 225		
Or		
Technical Elective ³	3	
Social Science Elective	3	
	16	

EGRS365 Prog. Logic Controllers	3	
ECON302 Managerial Economics ²	4	
EGMT216 CNC Manuf. Processes ²	3	
EGME275 Engineering Materials	3	
EGME276 Strength of Materials Lab	1	
Free Elective	3	
	17	

Fourth Year

EGNR491 Engineering Design Project I	3	
EGRS480 Manufacturing Automation	3	
EGRS481 Manufacturing Automation Lab	1	
Humanities Elective	4	
Technical Elective ³	4	
	15	

EGNR495 Engineering Design Project II	3	
Cultural Diversity Elective	3	
Technical Elective	3	
Humanities Elective	3	
MGMT360 Principles of Management	3	
	15	

Minimum Total credits required to complete BS degree = 124

¹Students placed above MATH102 should take MATH111. The MATH102 course credits (4 credits) do not apply towards the total credits required for the B.S. degree program.

²These courses may be offered only every other year.

³For the Minor in Robotics Technology: EGRS430 Systems Integration and Machine Vision (4 credits) course and the EGNR496 Senior Directed Project (3 credits) course are required for two of the technical electives.

⁴Grade of C or better required

Suggested Technical Electives, to total 10 credits minimum for the General Degree (or an additional 3 credits besides EGRS430 and EGNR496 for the Robotics minor): EGRS215 Introduction to Robotics (2 credits), EGNR250 Cooperative Education (2 credits), EGNR261 Energy Systems/Sustainability (3 credits), EGET310 Electronic Manufacturing Processes (4 cr), EGEE250 Micro-Controller Fundamentals (4 credits), EGME310 Vehicle Development & Testing (2 credits), MGMT 371 Business and Operations Analytics (3 credits), or other technical electives determined in agreement with the program coordinator.