

Northeast Iowa Community College
Engineering Technology (AAS)
 Educational Plan
 2017-2018

Name: _____ Student ID #: _____

Advisor: _____ Term and Year Started: _____

Graduation requirements for the Engineering Technology program are listed below along with any prerequisites. To earn a degree, students must complete all required core coursework with a minimum grade of C- and attain a 2.0 grade point average.

Courses on this educational plan may not be offered every term or every academic year. Please discuss course availability with an academic advisor or faculty member. It is the student's responsibility to understand and complete all degree requirements.

Reading requirement for all programs: The ability to read and comprehend information is a core value of Northeast Iowa Community College. A base reading assessment score or evidence of appropriate course completion will satisfy this requirement.

Term 1 – Fall

Course #	Course Title	Cr.	Prerequisites	Term/Year	Grade
EGR:400	Project Lead the Way® - Introduction to Engineering Design	3			
MAT:744	Technical Math	4	MAT:063, MAT:773, or qualif. placement score		
MFG:127	Manufacturing Print Reading Module II	1.5			
MFG:161	Introduction to Precision Measurement and Inspection Fundamentals	2			
MFG:187	Plant Safety	1			
MFG:293	Introduction to Basic CNC Mill Operations	1	Pre-/coreqs: MFG:161, MFG:187		
MFG:295	Introduction to Basic CNC Lathe Operations	1	Pre-/coreqs: MFG:161, MFG:187		
SDV:179	The College Experience	3	H. S. senior-standing or above		

Term 2 – Spring

Course #	Course Title	Cr.	Prerequisites	Term/Year	Grade
EGT:166	SolidWorks	2			
EGT:173	Manufacturing Materials	2			
IND:232	Introduction to Mechanical Systems	2.5			
IND:233	Introduction to Hydraulics/Pneumatics	1			
IND:238	Intermediate Hydraulics/Pneumatics	2	Pre-/coreq: IND:233		
MAT:747	Technical Math II	4	MAT:744 or qualif. placement score		
MFG:143	Manufacturing Print Reading Module III	1.5	MFG:127, MFG:161		
PHY:710	Technical Physics	3	MAT:128, MAT:130, MAT:210, MAT:216, MAT:219, or MAT:744		

Term 3 - Summer

Course #	Course Title	Cr.	Prerequisites	Term/Year	Grade
COM:723	Workplace Communications	3	SDV:200 or computer literacy rec.		
PSY:112	Psychology of Human Relations	3			

Term 4 - Fall

Course #	Course Title	Cr.	Prerequisites	Term/Year	Grade
CAD:104	Computer Aided Drafting	3			
EGT:306	Technical Project Management	2			
ELT:171	Programmable Logic Controllers (PLCs)	3			
IND:231	Introduction to Maintenance Electricity	2			
MAT:156	Statistics	3	MAT:102, MAT:747, or qualif. placement score		
MFG:505	Lean Manufacturing	1			
WEL:119	Maintenance Welding OR	1			
WEL:330	Welding Fundamentals	1			

Term 5 - Spring

Course #	Course Title	Cr.	Prerequisites	Term/Year	Grade
EGT:470	Project Lead the Way® – Engineering Design and Development OR	3	EGT:400, EGT:410		
EGT:801	Engineering Technology Internship	3	Successful completion of two previous terms in the ET program		
ELT:715	Introduction to Automation Systems/Robotics	3	ELT:123, ELT:171, or IND:235		
*	Technical Electives	6			

End of courses assessment of 6 or above converts EGT to an EGR credit.

EGR:470 credit given upon portfolio review (no end of course assessment given via PLTW)

*Technical Electives may include any combination of:

- BUS:130 Introduction to Entrepreneurship
- CAD:165 Rendering and Animation
- CAD:175 Advanced CAD: AutoCAD
- CIS:450 Project Lead the Way® – Computer Science Principles
- CON:113 Construction Print Reading
- EGR:410 Project Lead the Way® – Principles of Engineering*
- EGR:420 Project Lead the Way® – Digital Electronics*
- EGR:450 Project Lead the Way® – Computer Integrated Manufacturing*
- EGR:470 Project Lead the Way® – Engineering Design and Development*
- MFG:316 Introduction to Manufacturing Processes
- MFG:344 Introduction to CNC Lathe Programming
- MFG:345 Introduction to CNC Mill Programming
- WEL:110 Welding Blueprint Reading