



## Miami University

Department of Engineering Technology

### Bachelor of Science in Applied Science

Major: Electro-Mechanical Engineering Technology

Completion Program with

*Northwest State Community College*

This Bachelor of Science in Applied Science Completion Program is designed for students who have completed an associate degree in Electrical, Mechanical, Electro-Mechanical or similarly titled engineering technology programs. Graduates from other Engineering Technology programs will also receive favorable credit transfer. Through this program you can complete your BS degree by completing two-years of additional credit hours beyond your associate degree. Further information is available through [www.ent.muohio.edu](http://www.ent.muohio.edu) -- distance learning.

There are four areas of program requirements. About one-half of these requirements will be met while completing your associate degree. All credits earned with a grade of C or better will be transferred to Miami. In addition, students must meet the general requirements for graduation from Miami which include a minimum of 32 credit hours taken from Miami and 12 of the last 20 credit hours must be taken from Miami.

1. Complete your associate degree in Electrical, Mechanical, Electro-Mechanical or similarly titled Engineering Technology program at Northwest State Community College. *(These are NSCC classes and NSCC tuition)*
2. Complete the Ohio Transfer Module for Northwest State Community College. Once complete, have the registrar at your college stamp your transcript: "Ohio Transfer Module Complete". *(These are NSCC classes and NSCC tuition)*
3. Complete general education requirements specified by the Engineering Technology (ENT) department (\*Included in the Ohio Transfer Module). *(These are NSCC classes and NSCC tuition)*
4. Complete all Engineering Technology (ENT) core courses, Miami Plan Thematic Sequence (MPT) courses, and Miami Plan Capstone courses (MPC). *(These are Miami classes and Miami tuition, completed at Northwest State)*



*This articulation is meant to be a guide only. Your final degree requirements are established upon matriculation to Miami and are detailed in your degree audit report (DAR) provided by Miami. You will work with a Miami advisor to clarify final requirements. Students entering this program must meet all Miami University admission requirements available at [www.miami.muohio.edu](http://www.miami.muohio.edu) or in the Miami Bulletin. For students who graduated from high school after 1985, these requirements include a foreign language in high school (two years) or college (one year). Students who do not meet these requirements at admission will still be admitted but must make up any deficiencies prior to graduating from Miami.*

For more information about the Miami program, contact: Dean Engineering Technologies at Northwest State Community College, Dan Burklo, [dburklo@northweststate.edu](mailto:dburklo@northweststate.edu) Office: 419.267.1394

**1. Complete your associate degree at NSCC.**

In Alternative Energy Technology-Systems Design, Computer Science Engineering Technology, Electrical Engineering Technology, Mechanical Engineering Technology, or a similarly titled Engineering Technology program. *Completion of similar programs may require additional coursework to meet required coursework for Miami.*

**2. Complete the Ohio Transfer Module & Engineering Technology general education requirements.**

Below are courses required for the Ohio Transfer Module including the general education requirements (noted by \*). This will typically include eight (8) additional courses beyond the NSCC “Engineering Technology” associate degree.

<b>Four (4) English Required</b>					
ENG111	Composition I	3cr	ENG113	Speech *	3 cr
ENG112	Composition II	3	ENG210	Technical Communications *	3
<b>Four (4) Math Required</b>					
MTH109	College Algebra	3 cr	MTH213	Calculus I *	5 cr
MTH112	Trigonometry *	3	MTH214	Calculus II *	5
<b>Select one (1) Chemistry and both (2) Physics required</b>					
CHM201	General Chemistry I <b>OR</b> *	5 cr	PHY251	Physics: Mechanics & Heat	4 cr
CHM101	Principles of Chemistry *	4	PHY252	Physics: Electricity & Magnetism	4
<b>Select three (3) Arts and Humanities</b>					
ENG223	Interpretation of Literature	3 cr	HUM209	Ancient & Medieval Worlds	3 cr
ENG230	Children’s Literature	3	HUM210	Renaissance to Present	3
ENG250	American Lit: Thru Mid-19 <sup>th</sup> Cent.	3	HUM221	Music Appreciation	3
ENG251	American Lit: Since Mid-19 <sup>th</sup> Cent.	3	HUM230	Art Appreciation	3
ENG260	British Lit: Through the 18 <sup>th</sup> Century	3	PHI110	Critical Thinking and Logic	3
ENG261	British Lit: 19 <sup>th</sup> Century to Present	3	PHI201	Introduction to Philosophy	3
ENG271	Non-Western Literature	3	PHI210	Ethics	3
			PHI230	World Religions	3
<b>Select one (1) ECO and two (2) additional Social/Behavioral Science</b>					
ECO211	Macroeconomics <b>OR</b>	3 cr	PSY110	General Psychology	3 cr
ECO212	Microeconomics	3	PSY210	Abnormal Psychology	3
GEO110	World Geography	3	PSY220	Social Psychology	3
GEO210	Geography – US and Canada	3	PSY230	Human Growth and Development	3
HIS101	U.S. History Pre-1876	3	SSC101	Sociology	3
HIS102	U.S. History Post-1876	3	SSC102	Sociology for a Sustainable World	3
HIS203	U.S. Since 1945	3	SSC110	General Anthropology	3
HIS210	The Modern World	3	SSC120	American Government	3
HST240	Social Problems	3	SSC130	Comparative Government	3
HST242	Marriage and the Family	3	SSC210	Cultural Diversity	3

**3. Complete the remaining NSCC Engineering Technology core courses.**

This will typically include four (4) additional courses beyond the NSCC “Engineering Technology” associate degree.

<b>Select one (1) CAD</b>					
CAD112	CAD II	4 cr	CAD213	CAD III	4 cr
<b>Select one (1) Programming Language</b>					
EET240	Engineering Programming	3 cr	CIS150	Programming C++	4 cr
CIS111	Visual Basic Programming	4			
<b>Eight (8) Engineering Technology required</b>					
EET121	DC Circuits	3 cr	MET134	Engineering Materials	3 cr
EET122	AC Circuits	3	MET235	Statics	3
EET221	Digital Electronics *	3	MET234	Strengths	3
EET277	Industrial Electronics	3	MET255	Fluid Mechanics *	3

\*Depending on the degree completed, either Digital Electronics (EET221) or Fluid Mechanics (MET255) will need to be completed through Miami, as Digital Switching (ENT290) or Fluid Mechanics (ENT310) respectively.

**4. Complete the remaining Miami Engineering Technology degree requirements.**

Complete the Miami Plan Thematic Sequence (MPT) courses, and Miami Plan Capstone courses (MPC) at Miami University. This will typically include twelve (12) courses completed at the Northwest State campus through online and synchronously.

<b>Select one (1) depending on AAS Degree from NSCC</b>					
ENT290	Digital Switching *	3 cr	ENT310	Fluid Mechanics *	3 cr
<b>Eleven (11) Engineering Technology required</b>					
STA301	Applied Statistics	3 cr	ENT402	Industrial Automation	3 cr
MTH231	Discrete Math	3	ENT407	Modern Manufacturing	3
ENT301	Dynamics	3	ENT418	Electromechanical Control Systems	3
ENT311	Process Control Interface Design	3	ENT497	Senior Design I	2
ENT316	Project Management	3	ENT498	Senior Design II	2
ENT401	Computerized Instrumentation	3			