

Industrial Technology

Technology Education is an integrated discipline designed to develop students' technological literacy. Through the study of past, present, and future technological systems, and their resources, processes, and impacts on society, students will better understand the role of technology in society. The Technology Education-Industrial Technology program at MSU is for individuals wishing to work within an industry where a broad understanding of technological concepts is important. Unlike the Technology Education Broadfield Teaching option, the Industrial Technology option does NOT lead to teaching licensure. Rather, it is tailored for those individuals who are pursuing a career in an industry which requires a broad knowledge and skill set related to technology, including, but not limited to computing applications, precision agriculture and remote sensing, engineering technology applications, machining, and metal, plastics or wood fabrication enterprises.

The Technology Education Program is sequenced into three phases to develop a progression of interrelated information. The foundation phase constitutes the introduction to technology. This introduction forms the base for future study and an understanding of basic technological concepts. The synthesis phase begins the in-depth study of the primary technology education components of communication, construction, manufacturing, and power/energy. During this phase students in the industrial technology option begin selecting coursework tailored to meet specific career goals. The capstone phase of the program is structured to integrate the information and experiences of the preceding phases through applied learning activities. Industrial Technology option students will intern in business and industry areas related to their career interests.

Industrial Technology Option

Freshman Year	Credits	
	Fall	Spring
TE 207 - Materials and Processes	4	
AGED 140US - Leadership Development for Agriculture	3	
M 151Q - Precalculus	4	
WRIT 101W - College Writing I	3	
AGTE 291 - Special Topics	1	
DDSN 114 - Introduction to CAD		3
CHMY 121IN - Introduction to General Chemistry		3
CHMY 122IN - Introduction to General Chemistry Lab		1
WLDG 110 - Welding Theory I		1
WLDG 111 - Welding Theory I Practical		3
TE 250CS - Technology and Society		3
Year Total:	15	14
Sophomore Year	Credits	
	Fall	Spring
PHSX 205 - College Physics I	4	
TE 332 - Remote and Autonomous Aircraft Systems	3	
University Core (A, D, H, or S)	3	
ACTG 201 - Principles of Financial Accounting	3	
ECNS 101IS - Economic Way of Thinking	3	
ECNS 105 - Study Econ Way of Thinking	1	
AGTE 330 - Alternative Power & Energy Technology		3
EELE 101 - Introduction to Electrical Fundamentals		3

University Core (A, D, H, or S)	3	
Elective		3
EELE 261 - Intro To Logic Circuits		4
Year Total:	17	16

Junior Year	Credits	
	Fall	Spring
University Core (A, D, H, or S)	3	
BIOB 318 - Biometry	3	
ECNS 202 - Principles of Macroeconomics	3	
ECNS 204IS - Microeconomics	3	
BMKT 325 - Principles of Marketing	3	
AGED 315 - Electrical and Power Systems Operation		3
TE 410 - Computer Aided and Industrial Machining and Manufacturing		4
AGTE 417 - Manufacturing Technology		3
BMGT 205 - Prof Business Communication		3
BMGT 335 - Management and Organization		3
Year Total:	15	16
Senior Year	Credits	
	Fall	Spring
AGED 312R - Communicating Agriculture	3	
BGEN 361 - Principles of Business Law	3	
BFIN 322 - Business Finance	3	
or AGBE 345 - Agriculture Finance and Credit Analysis		
AGED 333 - Construction Technology	3	
Technology Elective	3	
TE 498 - Internship		12
Year Total:	15	12
Total Program Credits:		120

A minimum of 120 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above.

Technology Electives

ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
ACTG 125	QuickBooks	3
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BIOB 318	Biometry	3
BGEN 204	Business Fundamentals	3
BGEN 210	Accounting and Finance Basics	3
BGEN 235	Business Law	3
BMGT 410	Sustainable Business Practices	3
BMGT 448	Entrepreneurship	3
BMGT 461	Small Business Management	3
CS 145RA	Web Design	3
CSCI 109	C for Engineers and Scientists	3
CSCI 112	Programming with C I	3
CSCI 127	Joy and Beauty of Data	4
CSCI 132	Basic Data Structures and Algorithms	4
DDSN 131	Introduction to Drafting and Design	3
DDSN 135	SolidWorks I	3
DDSN 166	Revit I	3

DDSN 186	Intermediate Drafting & Design	3
DDSN 235	SolidWorks II	3
DDSN 276	Presentation & Animation	3
EGEN 125CS	Tech, Innovation, and Society	3
EGEN 203	Applied Mechanics	3
EIND 101	Introduction to Industrial & Management Systems Engineering	1
EIND 142	Introduction to Systems Engineering	2
EMAT 251	Materials Structures and Prop	3
EMAT 252	Materials Struct and Prop Lab	1
EMAT 350	Engineering Materials	3
ETME 203	Mechanical Design Graphics	3
ETME 310	Machining and Industrial Safety	3
GPHY 284	Intro to GIS Science & Cartog	3
HSTA 482	Technology and the Fate of Humanity	3
PHSX 305RN	Art and Science of Holography	3
STAT 216Q	Introduction to Statistics	3
or STAT 332	Statistics for Scientists and Engineers	
or STAT 337	Intermediate Statistics with Introduction to Statistical Computing	
TE 490R	Undergraduate Research	1-6
TE 492	Independent Study	1-3
WLDG 120	Welding Theory II	2
WLDG 121	Welding Theory II Practical	3
WLDG 145	Fabrication Basics	3
WLDG 185	Qualification Test Prep	2
WLDG 205	Applied Metallurgy	2