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 Program at MSU is for individuals wishing to teach technology at the middle or high school level or to work within an industry where a broad understanding of technological concepts is important.

Two Technology Education options are available to allow for diversity in personal interests and career aspirations. The Broadfield Teaching Option is designed for in-depth study of Technology Education. The Industrial Technology Option does not lead to teaching licensure and is tailored for those individuals who are pursuing a career in an industry which requires a broad background in technology.

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 teaching option are involved in professional education coursework, while students in the industrial technology option begin selecting coursework which is 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. Students in the teaching option student teach at the middle/high school level. Students in the non-teaching option intern in business and industry areas related to their career interests.

According to university policy, a grade of C- or better is required to satisfy requirements for pre-requisite and required courses in majors, minors, and certificate programs, and for all core requirements.

Industrial Technology Option

Freshman Year	**Credits**	
	Fall	**Spring**
US Core	3	
TE 101 - Intro to Technology Ed	1	
TE 207 - Materials and Processes	4	
M 151Q - Precalculus or STAT 216Q - Introduction to Statistics	3-4	
WRIT 101W - College Writing I	3	
DDSN 114 - Introduction to CAD		3
CHMY 121IN - Introduction to General Chemistry		4
EGEN 105 - Introduction to General Engineering		2
M 165Q - Calculus for Technology I or M 171Q - Calculus I		3-4
Elective		3
Year Total:	14-15	15-16
Sophomore Year	**Credits**	
	Fall	**Spring**
PHSX 205 - College Physics I	4	
TE 250CS - Technology and Society	3	
Technology Elective	3	
IH/RH Core	3-4	
Elective	3	
TE 330 - Alternative Power/Enrgy Tech		3
TE 410 - Computer Aided and Industrial Machining and Manufacturing		4
IS/RS Core		3
IA/RA Core		3-4
Elective		3
Year Total:	16-17	16-17
Junior Year	**Credits**	
	Fall	**Spring**
AGED 333 - Construction Technology or ARCH 241 - Building Construction I	3	
D Core	3	
Electives	9	
EELE 101 - Introduction to Electrical Fundamentals or AGED 315 - Electrical and Power Systems Operation		3
TE 331 - Electronic Communication Technology		4
Electives		8
Year Total:	15	15
Senior Year	**Credits**	
	Fall	**Spring**
EGEN 310R - Multidisciplinary Engineering Design	3	
TE 417 - Manufacturing Technology	3	
Electives	9	
TE 498 - Internship		12
Elective		3
Year Total:	15	15
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

BMGT 335	Management and Organization	3
BMGT 410	Sustainable Business Practices	3
BMGT 448	Entrepreneurship	3
BMGT 461	Small Business Management	3
CS 145RA	Web Design	3
EGEN 105	Introduction to General Engineering	2
EGEN 125CS	Tech, Innovation, and Society	3
EGEN 203	Applied Mechanics	3
ETME 203	Mechanical Design Graphics	3
ETME 310	Machining and Industrial Safety	3
GPHY 284	Intro to GIS Science & Cartog	3
GPHY 357	GPS Fund/App in Mapping	3
HSTA 482	Technology and the Fate of Humanity	3
PHSX 305RN	Art & Science of Holography	3
STAT 216Q	Introduction to Statistics	3
or STAT 217Q	Intermediate Statistical Concepts	
or STAT 332	Statistics for Scientists and Engineers	
TE 294	Seminar (max 4 credits)	1

TE 490R	Undergraduate Research	1-6
TE 492	Independent Study	1-3
TE 498	Internship	2-12
WLDG 110	Welding Theory I	1
WLDG 111	Welding Theory I Practical	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

Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.