

2011-2012 ENGINEERING TECHNOLOGY DEGREE PLAN

Name _____ ID: U _____ Advisor _____

Phone: _____ Email: _____ Eval/Entry Date: _____

FALL SEMESTER

FRESHMAN YEAR

**	()	ENGL 1010	3
**	()	MATH 1730	4
***	()	TECH 1711	3
***	()	TECH 1010	3
***	()	TECH 1411	1
			14

SPRING SEMESTER

**	()	ENGL 1020	3
***	()	MATH 1910	4
***	()	TECH 1211	3
***	()	TECH 1521	3
***	()	TECH 1811	3
			16

SOPHOMORE YEAR

ENGL Literature*	()	ENGL	3
***	()	PHYS 2010	3
***	()	PHYS 2011	1
**	()	TECH 2822	4
**	()	TECH 2821	3
History*	()		3
			17

	()	COMM 2381	3
***	()	PHYS 2020	3
***	()	PHYS 2021	1
**	()	TECH 3044	4
***	()	CHEM 1010	3
***	()	CHEM 1011	1
TECH Elective**	()		3
			18

JUNIOR YEAR

Humanities*	()		3
**	()	ENGL 3603	3
History*	()		3
TECH Elective**	()		3-4
TECH Elective**	()		3
			15-16

Social Science*	()		3
TECH Elective**	()		3
TECH Elective**	()		3
TECH Elective**	()		3
**	()	TECH 3440	3
**	()	TECH 4381	3
			18

SENIOR YEAR

Social Science*	()		3
TECH Elective**	()		3-4
TECH Elective**	()		3
TECH Elective**	()		3
**	()	TECH 4401	2
**	()	TECH 4943	1
			15-16

Humanities*	()		3
TECH Elective**	()		3-4
TECH Elective**	()		3
**	()	TECH 4462	3
**	()	TECH 4945	2
			14-15

Summary of Graduation Requirements:

- 60 semester hours at a senior (4-year) institution
- 30 of the final 60 semester hours must be taken as upper division courses in the Herff College of Engineering.
- Cumulative and U of M GPA 2.00 or better required.
- Courses designated with a single asterisk (*) must satisfy the General Education Requirements as described in the 2011-2012 U of M Undergraduate Catalog (see the back side of this sheet).
- A grade of C- or better is required in each course designated with a double asterisk (**).
- A grade of C- or better is required in each course designated with a triple asterisk (***) and the ten (10) courses noted with a triple asterisk (***) must have a combined GPA of 2.5.
- Complete minimum of TWO Technical Specialty elective sequences to be selected in consultation with faculty advisor.
- All students are required to file an intention to graduate during the semester preceding the semester of graduation. Deadlines are published in the academic calendar. It is the responsibility of the student to insure that this deadline is met.

COMMENTS: _____

GENERAL EDUCATION and BSET REQUIREMENTS

Communication

ENGL 1010 English Composition
ENGL 1020 English Composition and Analysis
COMM 2381 Oral Communication and Rhetoric
ENGL 3603 Engineering Communications

Humanities and Fine Arts

Select One of the Following: ENGL 2201 Literary Heritage
ENGL 2202 Literary Heritage: African-American Emphasis

Plus Two (2) of the Following:: ART 1030 Introduction to Art
ARTH 2101 World Art I
ARTH 2102 World Art II
CLAS 2481 Mythology
COMM 1851 Introduction to Film
DANC 1151 Introduction to Dance
JDST 2850 Religions of Abraham: Judaism, Christianity, Islam
MUS 1030 Music Appreciation
MUS 1040 Music in America
PHIL 1101 Classical Issues in Philosophy
PHIL 1102 Values and the Modern World
POLS 1101 Introduction to Ancient Political Thought
POLS 1102 Introduction to Modern Political Thought
RLGN 1100 Introduction to Religion
THEA 1030 Introduction to Theatre
UNIV 3580 Hebrew and Greek Legacy
UNIV 3581 Faith, Reason, and Imagination

Social and Behavioral Sciences

Select Two of the Following: ANTH 1100 Human Origins and Variations
ANTH 1200 Cultural Anthropology
CSED 2101 The Family in Global Perspective
ECON 2110 Introduction to Macroeconomics
ECON 2120 Introduction to Microeconomics
ESCI 1301 Survey of World Regions
ESCI 1401 Introduction to Cultural Geography
POLS 1100 American Government
POLS 1301 Governments of the World
POLS 1501 International Relations
PSYC 1200 General Psychology
PSYC 3510 Deviance: Its role in History and Culture
SOCI 1111 An Introduction to Sociology
SOCI 2100 Sociology of International Development
UNIV 2304 Gender and Society

History

Select Two* of the Following: ANTH 3282 Cultural History of American Communities
HIST 1110 Development of World Civilization I
HIST 1120 Development of World Civilization II
HIST 2010 The United States to 1877
HIST 2020 The United States since 1877
HIST 2030 History of Tennessee
HIST 3863 Social & Intellectual History of the United States
HIST 3881 African-American History
HIST 4851 History of Women in America
POLS 4212 Constitutional Law
POLS 4405 Origin and Development of American Political Thought
SOCI 3422 Racial and Ethnic Minorities

**Students who have not completed one year of American History in high school must complete 6 credit hours of American History or 3 credit hours of American History plus 3 credit hours of Tennessee History in order to satisfy the History General Education requirement.*

Natural Sciences

CHEM 1010/1011 Chemistry of Materials w/Lab
PHYS 2010/2011 General Physics I / Trigonometry w/Lab
PHYS 2020/2021 General Physics II / Trigonometry w/Lab

Mathematics

MATH 1730 College Algebra and Trigonometry
MATH 1910 Calculus I

Bachelor of Science in Engineering Technology

Technical Specialty Course Sequences

The BSET program requires 31-33 semester hours of technical electives. Complete a minimum of two (2) technical specialty elective course sequences selected from the list below:

Automation & Control Systems (13 hrs):

TECH 2831 (3) Advanced Solid-State Technology & Lab
TECH 3821 (3) Industrial Electronics & Lab
TECH 3822 (4) Programmable Logic Controllers & Lab
TECH 3841 (3) Electrical Power and Motor Control & Lab ***OR***
TECH 4474 (3) Automation and Robotics & Lab ***OR***
TECH 4823 (3) Advanced Prog. Logic Controllers & Lab

Electronic Communication Systems (13 hrs):

TECH 2831 (3) Advanced Solid-State Technology & Lab
TECH 3811 (3) Electronic Communications & Lab
TECH 3812 (3) Advanced Electronic Communications
TECH 4821 (4) Microwave Technology & Lab

Mechanical Systems Design (16 hrs):

TECH 3401 (3) Strength of Materials
TECH 3421 (4) Manufacturing Processes II & Lab
TECH 3573 (3) Dynamics & Design for Automation
TECH 4472 (3) Computer Aided Drafting & Lab
TECH 4571 (3) Tool Design & Lab

Microprocessor Systems (15 hrs):

TECH 2831 (3) Advanced Solid-State Technology & Lab
TECH 3232 (4) Digital Technology & Lab
TECH 3233 (4) Microprocessor Technology & Lab
TECH 4234 (4) Microprocessor Interfacing & Lab

Operations Strategy & Lean Principles (9 hrs):

TECH 4460 (3) Work Design/Improvement/Measurement
TECH 4464 (3) Production Control Systems
TECH 4466 (3) Facility Design

Product Realization (15 hrs):

TECH 3401 (3) Strength of Materials
TECH 3421 (3) Manufacturing Processes II & Lab
TECH 4472 (3) Computer Aided Drafting & Lab
TECH 4474 (3) Automation and Robotics & Lab
TECH 4476 (3) Computer Aided Manufacturing & Lab

Software Design (14 hrs):

TECH 2251 (3) Advanced Programming Technology
TECH 2261 (3) Data Structures
TECH 4262 (4) Modern Programming & Lab
TECH 4263 (4) Server Application Technology & Lab

Systems Modeling (19 hrs):

TECH 2261 (3) Data Structures
TECH 3232 (4) Digital Technology & Lab
TECH 4262 (4) Modern Programming & Lab
TECH 4272 (4) Operating Systems & Lab
TECH 4281 (4) Computer Network Tech & Lab

Web Programming (14 hrs):

TECH 3241 (3) Internet Technology
TECH 4242 (3) Client Application Technology
TECH 4262 (4) Modern Programming
TECH 4263 (4) Server Application Technology & Lab