

Name _____

Phone _____

E-mail _____

Student BSU ID # _____

Soc Sec # _____

Liberal Education 42 credits **13 credits could apply to III.**

Required Foundation Courses

1. Oral & Written Comm.

(2 courses-min. 6 credits)

	Sem.	Gr.	Cr.
College Writing I			3
College Writing II			3

2. Critical Thinking

	Sem.	Gr.	Cr.

3. Natural Sciences

(2 courses-min. 7 credits-
1 lab requirement)

See III. Required Foundation Courses

	Sem.	Gr.	Cr.

4. Math/Symbolic Systems

(1 course-min. 3 credits)

See III. Required Foundation Courses

	Sem.	Gr.	Cr.

**5. History, Social &
Behavioral Sciences**

(2 courses-min. 6 credits)

	Sem.	Gr.	Cr.

6. Humanities-Arts, Lit. Phil.

(2 courses-min. 5 credits)

	Sem.	Gr.	Cr.

7. Human Diversity

(1 course-min. 2 credits)

	Sem.	Gr.	Cr.

8. Global Perspective

(1 course-min. 3 credits)

	Sem.	Gr.	Cr.

9. Ethical & Civic Responsibility

(1 course-min. 3 credits)

	Sem.	Gr.	Cr.

10. People and the Environment

(1 course-min. 3 credits)

	Sem.	Gr.	Cr.

11. Performance & Participation

(1 credit or more)

	Sem.	Gr.	Cr.

Industrial Technology – 68 credits

Required Technical Core – 32 cr.	Sem.	Gr.	Cr.
IT 1100 Orientation to IT Programs			1
IT 1210 Mat & Proc-Forming			4
IT 1220 Mat & Proc-Separating			4
IT 1310 Mechanical Power			2
IT 1350 Electronic Technology			4
IT 1410 Communication Technology			3
IT 1460 Technical Graphics			3
IT 2250 Construction Technology			2
IT 2370 Automation Technology			3
IT 3310 Fluid Power			3
IT 4537 Industrial Design			3
Total Technical Core Credits 32			

Required Professional Core – 18 cr.	Sem.	Gr.	Cr.
IT 3870 Tech Sales/Presentation			2
IT 3880 Human Resource Dev			2
IT 3890 Mat Hand & Plant Layout			2
IT 4877 Ind Maint & Safety			3
IT 4878 Quality Assurance			3
IT 4890 Ind Org & Leadership			3
IT 4897 Project Management			3
Total Professional Core Credits 18			

III. Required Foundation Courses 13 credits – 13 credits of these classes could be taken as part of the Liberal Education Requirements.

Students are required to take 6 credits of Math at the 1100 or higher level. In addition, students are required to take 7 credits from among Physics, Chemistry, or SCI 1110 and/or SCI 1120 courses that are approved to fulfill the Liberal Education Category.

Select from 4 areas of specialization - 18 credits

- Construction Technology
- Manufacturing Technology
- Manufacturing Management
- Model Making

Many students select two emphasis areas. See emphasis areas and courses on the reverse side.

Degree Summary

Liberal Education	42 credits
Technical Core	32 credits
Professional Core	18 credits
Field of Emphasis	18 credits
Free Electives	18 credits
Total Credits Required for Graduation	128 credits

Many Students select two emphasis areas.

Construction Management - 18 credits

Some potential job titles: Construction supervisor, project engineer, project manager, and estimator.

Block I – 12 credits	Sem	Gr.	Cr.
<i>Complete all of the following</i>			
IT 3240 Const Mat & Practices			3
IT 3250 Print Read & Proj Doc			3
IT 3260 Proj Bidding & Estimating			3
IT 4259 Const Management			3

Block II – Select 6 credits *Select Non – Liberal Education courses taught by Business Administration or Accounting or Internship*

IT 4970 Internship			1-3

Manufacturing Management - 18 credits

Some potential job titles: supervisor, production manager, industrial engineer, and quality manager

Block I – Select 12 credits	Sem	Gr.	Cr.
IT 3460 Parametric 3-D Model			3
IT 3877 Eng Problem Solving			3
IT 3879 Perf Measurement			3
IT 4870 Prod Management			3
IT 4880 Total Quality Mgmt			3

Block II – Select 6 credits *Select Non – Liberal Education courses taught by Business Administration or Accounting or Internship*

IT 4970 Internship			1-3

Notes:

Upon request, this document can be made available in alternate formats. Please contact the office of Technological Studies at 218-755-2950 for assistance. For TTY communications contact the Minnesota Relay Service at (612) 297-5353 or 1-800-627-3529 and ask them to contact the Technological Studies office at 218-755-2950.

Manufacturing Technology - 18 credits

Some potential job titles: manufacturing engineer, supervisor, and industrial engineer.

Block I – Select 12 credits	Sem	Gr.	Cr.
IT 2608 Comp Cont Machining			3
IT 3217 Mat Sci & Metallurgy			3
IT 3218 Adv Machining Proc			3
IT 3460 Parametric 3-D Model			3
IT 3877 Eng Problem Solving			3

Block II – Select 6 credits *Select courses applicable toward a minor in Computer Science (Non-teaching), Physics (may include lower sequence), Chemistry or Math (Applied Technical Emphasis) or Internship*

IT 4970 Internship			1-3

Virtual Modeling - 18 credits

Some potential job titles: CAD operator, basic product development, and parametric modeler

Block 1 – 12 credits	Sem	Gr.	Cr.
IT 2608 Computer Cont Mach			3
IT 3460 Parametric 3D Model			3
IT 4006 Topics in Virtual Modeling			3
Modl 2250 3D Solid Modeling (NTC)			3

Block II – Select 6 credits *Select Non – Liberal Education courses taught by Business Administration or Accounting or Internship*

IT 4970 Internship			1-3