South Dakota State University

Bachelor of Science
Major: Operations Management
2025-2026 Sample 4-Year Plan
Total Degree Requirements: 120 credits

Student _____ **Student ID#** _____ **Student Phone #** _____

Advisor _____ **Minimum GPA** 2.0 **Minor/Career Interest(s)** _____

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the Undergraduate Catalog.

FIRST YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CM 130	Management Tools and Analysis		3		
ENGL 101	Composition I (SGR #1)	p. ENGL 033, ENGL 039, or placement	3		
ECON 119 or GE 101	First Year Seminar or Introduction to Engineering and Technical Professions		1		
GE 121 & 123 OR ME 212	Engineering Design Graphics I & Computer Aided Drawing OR Mechanical Engineering Design Technologies	c. MATH 114 or higher	2		
MATH 121- 121L or MATH 123- 123L	Survey of Calculus and Lab (SGR #5) or Calculus I and Lab (SGR #5)	p. MATH 114, MATH 115, or placement	5		
		Total Credit Hours	14		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CHEM 106- 106L or CHEM 112- 112L	Chemistry Survey and Lab (SGR #6) or General Chemistry I and Lab (SGR #6)	p. One collegiate math course	4		
CMST 101	Foundations of Communication (SGR #2)		3		
ECON 201	Principles of Microeconomics (SGR #3)		3		
ET 210- 210L	Introduction to Electronic Systems and Lab	p. MATH 114	4		
SGR #4	Arts and Humanities		3		
		Total Credit Hours	17		

SECOND YEAR

Electronics Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ET 220- 220L	Analog Electronics and Lab	p. ET 210/L	4		
ET 232- 232L	Digital Electronics and Microprocessors and Lab	p. ET 210/L	3		
PHYS 101- 101L or PHYS 207- 207L	Survey of Physics and Lab (SGR #6) or Fundamentals of Physics I and Lab (SGR #6)		4		
OM 240	Decision Making Processes in Management	p. MATH 114	3		
SGR #3	Social Sciences - Civics Requirement	Select from the designated list of courses to fulfill civics requirement	3		
		Total Credit Hours	17		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ACCT 210	Principles of Accounting I		3		
ECON 202	Principles of Macroeconomics		3		
SGR #1	Written Communication	p. ENGL 101	3		
MNET 367- 367L	Production Strategy and Lab	p. MNET 150 or MNET 231 or ET 232/L or ME 121/L	3		
STAT 281	Introduction to Statistics	p. MATH 103 or higher	3		
		Total Credit Hours	15		

Manufacturing Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ACCT 210	Principles of Accounting I		3		
SGR #1	Written Communication	p. ENGL 101	3		

Information Subject to Change. This is not a contract.

p. = Course Prerequisite; c. = Course Co-requisite
Semester: F = Fall, S = Spring, SU = Summer

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MNET 231- 231L or ME 121- 121L	Manufacturing Processes I and Lab or Production and Fabrication Processes and Lab		2-3		
PHYS 101- 101L or PHYS 207- 207L	Survey of Physics and Lab or Fundamentals of Physics I and Lab (SGR #6)		4		
SGR #3	Social Sciences - Civics Requirement	Select from the designated list of courses to fulfill civics requirement	3		
		Total Credit Hours	15-16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ECON 202	Principles of Macroeconomics		3		
MNET 367- 367L	Production Strategy and Lab	p. MNET 150 or MNET 231 or ET 232/L or ME 121/L	3		
SGR #4	Arts and Humanities		3		
STAT 281	Introduction to Statistics	p. MATH 103 or higher	3		
Technical Elective			1-2		
		Total Credit Hours	13-14		

Supply Chain Management Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ACCT 210	Principles of Accounting I		3		
SGR #1	Written Communication	p. ENGL 101	3		
ET 232-232L or MNET 231-231L	Digital Electronics and Microprocessors & Lab or Manufacturing Processes I & Lab	p. ET 210/L or ME 121/L	2-3		
PHYS 101- 101L or PHYS 207- 207L	Survey of Physics and Lab (SGR #6) or Fundamentals of Physics I and Lab (SGR #6)		4		
SGR #3	Social Sciences - Civics Requirement	Select from the Designated list of courses to fulfill civics requirement	3		
		Total Credit Hours	15-16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BLAW 350	Legal Environment of Business		3		
ECON 202	Principles of Macroeconomics		3		
MNET 367- 367L	Production Strategy and Lab	p. MNET 150 or MNET 231 or ET 232/L or ME 121/L	3		
SGR #4	Arts and Humanities		3		
STAT 281	Introduction to Statistics	p. MATH 103 or higher	3		
		Total Credit Hours	15		

THIRD YEAR

Electronics Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MGMT 360	Organization and Management		3		
BLAW 350 or MKTG 370	Legal Environment of Business or Marketing		3		
CSC 325	Management Information Systems		3		
ECON 319	Seminar with Industry Leaders		1		
ET 330- 330L	Microcontrollers and Networks and Lab	p. ET 232/L and CSC 150 or OM 240	3	SP	
SGR #4	Arts and Humanities		3		
		Total Credit Hours	16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ET 380- 380L	Circuit Boards and Design and Lab	p. ET 220/L	3		
GE 231	Technology, Society, and Ethics		3		
OM 425 or OM 465	Production and Operations Management or Quality Control Applications	p. STAT 281 and MNET 367/L or p. OM 462, STAT 281 or STAT 381	3		
OM 462	Quality Management	p. STAT 281 or STAT 381	3		
		Total Credit Hours	12		

Manufacturing Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MGMT 360	Organization and Management		3		
ET 451- 451L	Industrial Controls and PLCs and Lab	p. ET 210/L	3		
GE 425	Occupational Safety and Health Management		3		
MKTG 370	Marketing		3		
OM 240	Decision Making Processes in Management	p. MATH 114	3		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CSC 325	Management Information Systems		3		
ECON 319	Seminar with Industry Leaders		1		
GE 231	Technology, Society, and Ethics		3		
OM 425	Production and Operations Management	p. STAT 281 and MNET 367/L	3		
OM 462	Quality Management	p. STAT 281 or STAT 381	3		
Technical Elective			1-2		
		Total Credit Hours	14-15		

Supply Chain Management Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MGMT 360	Organization and Management		3		
CSC 325	Management Information Systems		3		
ET 451- 451L	Industrial Controls and PLCs and Lab	p. ET 210/L	3		
GE 425	Occupational Safety and Health Management		3		
OM 240	Decision Making Processes in Management	p. MATH 114	3		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ECON 319	Seminar with Industry Leaders		1		
GE 231	Technology, Society, and Ethics		3		
MKTG 370	Marketing		3		
OM 425	Production and Operations Management	p. STAT 281 and MNET 367/L	3		
OM 462	Quality Management	p. STAT 281 or STAT 381	3		
Technical Elective			1-2		
		Total Credit Hours	14-15		

FOURTH YEAR

Electronics Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
ET 451- 451L	Industrial Controls and PLCs and Lab	p. ET 210/L	3		
GE 425	Occupational Safety and Health Management		3		
GE 470	Project Management	p. ENGL 201 or ENGL 277, senior standing, or instructor approval	2		
MNET 460	Engineering Economic Analysis	p. MATH 114	3		
OM 463	Supply Chain Management	p. >=C OM 425; STAT 281 or STAT 381	3		
Technical Elective			2-3		
		Total Credit Hours	16-17		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BADM 485	Strategic Management	p. Senior Standing/ BLAW 350, MGMT 360, HRM 460/ Requires C or better	3		
HRM 460	Human Resource Management	p. MGMT 360	3		
MNET 468	Manufacturing Plant Management	p. MNET 367/L	3		
OM 472	Cross-Disciplinary Project Experience		3		
OM 490	Seminar		1		
OM 490	Seminar		1		
		Total Credit Hours	14		

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Semester: F = Fall, S = Spring, SU = Summer

Manufacturing Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BLAW 350	Legal Environment of Business		3		
GE 470	Project Management	p. ENGL 201 or ENGL 277; senior standing, or instructor approval	2		
HRM 460	Human Resource Management	p. MGMT 360	3		
MNET/OM 460	Engineering Economic Analysis	p. MATH 114	3		
OM 463	Supply Chain Management	p. >=C in OM 425; STAT 281 or STAT 381	3		
Technical Elective			1-2		
		Total Credit Hours	16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BADM 485	Strategic Management	p. Senior Standing/ BLAW 350, MGMT 360, HRM 460/ Requires C or better	3		
MNET 468	Manufacturing Plant Management	p. MNET 367/L	3		
OM 465	Quality Control Applications	p. OM 462; STAT 281 or STAT 381	3		
OM 472	Cross-Disciplinary Project Experience		3		
OM 490	Seminar		1		
		Total Credit Hours	13		

Supply Chain Management Emphasis

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
GE 470	Project Management	p. ENGL 201 or ENGL 277; senior standing, or instructor approval	2		
HRM 460	Human Resource Management	p. MGMT 360	3		
MNET 468	Manufacturing Plant Management	p. MNET 367/L	3		
MNET/OM 460	Engineering Economic Analysis	p. MATH 114	3		
OM 463	Supply Chain Management	p. >=C in OM 425; STAT 281 or STAT 381	3		
		Total Credit Hours	14		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
BADM 485	Strategic Management	p. Senior Standing/ BLAW 350, MGMT 360, HRM 460/ Requires C or better	3		
OM 415	Logistics and Transportation Management	p. STAT 281	3		
OM 435	Warehouse Management	p. MNET 367/L	3		
OM 472	Cross-Disciplinary Project Experience		3		
OM 490	Seminar		1		
Technical Elective			1-2		
		Total Credit Hours	14-15		

COMMENTS/NOTES

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.