

# Bachelor of Science Occupational and Technical Studies with a Major in Industrial Technology (BS)

## Requirements

### Lower-Division General Education

Written Communication ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written</a> )	6
Oral Communication ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral</a> )	3
Mathematics ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math</a> )	3
Language and Culture ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language</a> )	0-6
Information Literacy and Research ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information</a> )	3
Human Behavior ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior</a> )	3
Human Creativity ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity</a> )	3
Interpreting the Past ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret</a> )	3
Literature ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature</a> )	3
Philosophy and Ethics ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy</a> )	3
The Nature of Science ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature</a> )	8
Impact of Technology ( <a href="http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact">http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact</a> )	3

Written Communication: Grade of C or better required in both courses

Oral Communication: met in the major by HMSV 339

Mathematics: MATH 101M or MATH 102M or MATH 103M and STAT 130M required

Information Literacy and Research: STEM 251G required

Human Creativity cannot be met by SEPS 223A

Human Behavior: PSYC 201S required; cannot be met by SEPS 203S

Impact of Technology: satisfied by STEM 370T in the major

### Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Education and Professional Studies and not required by the major (6 hours)

### Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

## Industrial Technology Major

This major is designed to prepare students to enter industry as supervisors, technical managers, or trainers. The major is also available through ODUGlobal. Additional industrial technology areas are available for transfer students. On approval of the program leader, select technical content areas from the community college can satisfy the 30 hours of technical content for this major. Requirements are as follows:

### General Education

Complete lower-division requirements 38-44

Complete upper-division requirements (minimum of 6 credit hours) 6

### Industrial Technology

Technical Content-General:

MET 120	Computer Aided Drafting	3
STEM 221	Industrial Materials	3
STEM 231	Materials and Processes Technology	3
STEM 241	Energy Systems: Basic Electricity	3
STEM 242	Technological Systems Control	3
STEM 321	Manufacturing Technology	3
STEM 351	Communication Technology	3
STEM 382	Industrial Design	3
SEPS 395	Topics in Occupational Education (Design for Production)	3
STEM 495	Topics (Building, Design, and Development)	3

Supervision:

HMSV 339	Interpersonal Relations	3
SEPS 302	Workforce Supervision Management	3
STEM 365	Safety and OSHA Certification	3
SEPS 405	Directed Work Experience (Internship)	4
SEPS 481	Career and Professional Development	3
SEPS 400	Instructional Systems Development	3
SEPS 402	Instructional Methods in Occupational Studies	3
STEM 370T	Technology and Society (Writing Intensive) *	3

Business Cognate:

ACCT 201	Principles of Financial Accounting	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 330 or MGMT 340	Organizational Behavior Human Resource Management	3
MKTG 311	Marketing Principles and Problems	3
Approved Business Electives - 2 courses		6

### Electives

Elective credit 3

**Total Credit Hours 120-126**

\* Grade of C or better required

## Electives

Elective credit may be needed to meet the minimum of 120 credits required for the degree. Additional credits may be needed if a minor is pursued.

## Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
<b>Freshman</b>		
<b>Fall</b>		
ENGL 110C	English Composition (C or better required)	3
MATH 101M or MATH 102M or MATH 103M	An Introduction to Mathematics for Critical Thinking or College Algebra or College Algebra with Supplemental Instruction	3
Interpreting the Past		3
Elective or Foreign Language (if required)		0-3
STEM 251G	Computer Literacy: Communication and Information	3
<b>Credit Hours</b>		<b>12-15</b>
<b>Spring</b>		
Literature		3
Human Creativity (cannot be met by SEPS 223A)		3
PSYC 201S	Introduction to Psychology	3
Elective or Foreign Language (if required)		0-3
MET 120	Computer Aided Drafting	3
<b>Credit Hours</b>		<b>12-15</b>
<b>Sophomore</b>		
<b>Fall</b>		
Nature of Science I		4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
ACCT 201	Principles of Financial Accounting	3
STEM 231	Materials and Processes Technology	3
STEM 241	Energy Systems: Basic Electricity	3
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
Nature of Science II		4
Philosophy and Ethics		3
STAT 130M	Elementary Statistics	3
STEM 221	Industrial Materials	3
STEM 242	Technological Systems Control	3
<b>Credit Hours</b>		<b>16</b>

## Junior

### Fall

MKTG 311	Marketing Principles and Problems	3
MGMT 325	Contemporary Organizations and Management	3
SEPS 302	Workforce Supervision Management	3
STEM 321	Manufacturing Technology	3
STEM 351	Communication Technology	3
<b>Credit Hours</b>		<b>15</b>

### Spring

HMSV 339	Interpersonal Relations	3
MGMT 330 or MGMT 340	Organizational Behavior or Human Resource Management	3
STEM 382	Industrial Design	3
Minor or Upper-Division General Education		3
SEPS 395	Topics in Occupational Education (Design for Production)	3
<b>Credit Hours</b>		<b>15</b>

### Summer

SEPS 405	Directed Work Experience (internship)	4
<b>Credit Hours</b>		<b>4</b>

## Senior

### Fall

STEM 370T	Technology and Society (writing intensive; C or better required)	3
SEPS 400	Instructional Systems Development	3
STEM 365	Safety and OSHA Certification	3
Elective		3
Approved Business Elective		3
<b>Credit Hours</b>		<b>15</b>

### Spring

SEPS 402	Instructional Methods in Occupational Studies	3
Approved Business Elective		3
Minor or Upper-Division General Education		3
STEM 495	Topics (Building, Design, and Development)	3
SEPS 481	Career and Professional Development	3
<b>Credit Hours</b>		<b>15</b>
<b>Total Credit Hours</b>		<b>120-126</b>

## BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-

entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

## **BA or BS to MPA (Master of Public Administration) Linked Program**

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.