

Millersville University
Dept. of Applied Engineering, Safety & Technology

120 credits minimum – Effective Fall 2020
(rev FA21_AENG)

Bachelor of Science (B.S.)

Occupational Safety & Environmental Health

DEPARTMENTAL REQUIREMENTS (61 credits)

Technical Option (45 credits)

Grade	Course No.	Title	Cr
	OSEH 120	Safety, Health & Environmental Issues	3
	OSEH 220	Legal Aspects of Safety & Hygiene	3
	OSEH 221	Fire Prevention, Protection & Control	3
	OSEH 320	Safety Engineering Principles (<i>prereq OSEH 120</i>)	3
	OSEH 321	Industrial Hygiene—Chemical & Biological Hazards (<i>prereqs OSEH 120; and MATH 151 or 160 or 161; and CHEM 104</i>)	4
	OSEH 323	Human Factors (<i>prereq OSEH 120</i>)	3
	OSEH 333	Intro to System Safety (<i>prereqs OSEH 320 & MATH 130</i>)	3
	OSEH 410	OS&H Management (<i>prereqs OSEH 220 & OSEH 320</i>)	3
	OSEH 422	Industrial Hygiene—Physical Hazards (<i>prereqs PHYS 103 or 104 or 131; and MATH 151 or 160 or 161</i>)	4
	OSEH 430	Topics in Occupational Safety & Environmental Health	1
	OSEH 435	Environmental Health (<i>prereq OSEH 321 or ENVI 330</i>)	3
	OSEH 440	Internship in Industry (<i>permission of OSEH coordinator required</i>)	12

REQUIRED RELATED COURSES (29-30 credits)

Required Related – Math (*MATH 130 fulfills the Gen Ed Math Requirement*)

Grade	Course No.	Title	Cr
		Select ONE of MATH 151, 160, or 161	
	MATH ____	• MATH 151 Calc for Management (<i>prereq C- or higher in MATH 101 or MPT 151</i>)	4
		• MATH 160 Precalculus (<i>prereq C- or higher in MATH 101 or MPT 160</i>)	4
		• MATH 161 Calculus I (<i>prereq C- or higher in MATH 160 or MPT 161</i>)	4
	MATH 130	Elements of Statistics (<i>prereq: See Web Schedule or Undergrad Catalog</i>)	3

Required Related – Biology & Chemistry (*Fulfills the G2 Science Requirements*)

Grade	Course No.	Title	Cr
	BIOL 100	General Biology — or a higher-level BIOL	3
	CHEM 103	General, Organic, Biochem I	3
	CHEM 104	General, Organic, Biochem II	3

Required Related – Physics & AENG

Grade	Course No.	Title	Cr
	AENG 130	Production Materials & Processes	3
	AENG 392	Industrial Training (W)	3
		Complete either Option A or Option B:	
		Option A	
		• PHYS 131 and	4

—	—	• PHYS 132	4
—	—	— OR —	
		Option B	
		• One PHYS 103 or 104 or 131 and	4
		• AENG 120	3

GENERAL EDUCATION REQUIREMENTS (48 credits)

Note: 12 credits of Gen Ed are fulfilled by Required Related Courses

G1 – HUMANITIES & FINE ARTS [ART, COMM/THEATRE, ENGL, FOREIGN LANG/HUMN, MUSI, PHIL] (9 credits)

No more than 2 courses from the same dept are permitted; all three courses could be from different depts.

Grade	Course No.	Title	Cr
			3
			3
			3

G2 – SCIENCE & MATH — *These credits are fulfilled by Required Related Math & Science* (9 credits)

G3 – SOCIAL SCIENCES [AFAM, ANTH, BUAD, GEOG, GOVT, HIST, INTL, PSYC, SOCY, SOWK/GERT, WSTU] (9 credits)

No more than 2 courses from the same dept are permitted; all three courses could be from different depts.

Grade	Course No.	Title	Cr
			3
			3
			3

Additional General Education Requirements (18 credits)

Grade	Course No.	Title	Cr
	COMM 100	Fundamentals of Speech (<i>minimum of "C-" required</i>)	3
	ENGL 110	English Composition (<i>minimum of "C-" required</i>)	3
x	x	Math course (<i>fulfilled by Required Related Math</i>)	3
	WELL 175	Wellness	3
		Perspectives [P] (<i>NOTE: AENG 301, 302, or 303 [D] recommended</i>)	3
		UNIV 103 or Open Elective (<i>Open Elective cannot be a course from major dept</i>)	3

Advanced Writing (AW) Course (3 credits)

Grade	Course No.	Title	Cr
	ENGL ____	Select ONE from: • ENGL 312 Technical Writing • ENGL 318 Web Writing • ENGL 316 Business Writing • ENGL 319 Science Writing	3

GENERAL EDUCATION REQUIREMENTS CHECKLIST:

Three G1, G2, or G3 courses at **200-LEVEL OR HIGHER:** (1) _____ (2) _____ (3) _____

Three **WRITING** [W] courses (*does not include ENGL 312/316*): (1) _____ (2) _____ (3) *AENG 392* *completed*

One **CULTURAL DIVERSITY** [D] course: (1) _____

FREE ELECTIVES (6-7 credits) – needed to bring overall total to 120 credits; depends on credit value of science & math courses selected

____ _____ ___ cr _____ _____ ___ cr
____ _____ ___ cr

Effective Fall 2020