# Polymer Materials Engineering, BS



vu.edu/

Spring

Major Credits: 150 (GURs not included)
Course offerings subject to change

Fall

Pre-major coursework in grey areas

Admissions info: https://engineeringdesign.wwu.edu/
Academic advising available - see contact info below
Full major courses in white

First year

MATH 124 (5) Calculus 1	FWS	MATH 125 (5) Calculus II	FWS	PHYS 162 (5) Physics w/ Calc II	WS
CHEM 161 (5) Gen Chemistry I	FWS	PHYS 161 (5) Physics w/ Calc I	FW	ENGR 115 (4) Innovation in Design	WS
ENGR 101 (2) Eng., Design, & Society	FWS	CHEM 162 (5) Gen Chemistry II	FWS		

Winter

Second

ENGR 170 (4) Intro to Material Science FW		APPLY TO FULL MAJOR		FULL MAJOR COURSES BEGIN	
ENGR 214 (4) Statics	FW	ENGR 225 (4) Mechanics of Materials	s WS	MFGE 261 (4) Intro to CAD	S
PHYS 163 (5) Physics w/ Calc III	FS	CSCI 140 or 141 (4) Program. Fund.	FWS	PME 371 (5) Intro to Plastics	F <u>S</u>
		MATH 341 or 345 Statistics (4)	FWS	MFGE 250 (4) Intro Manuf. Automatio	n S

#### Eligible pre-majors apply to the major during winter quarter. Accepted students start major courses spring quarter.

Third

CHEM 251 (4) Elem. Organic Chemsitry F	PME 372 (5) Intro to Composites W	CHEM 308 (3) Polymer Chemistry S
MFGE 341 (4) Quality Assurance <u>F</u> W	PME 342 (4) Design of Experiments <u>W</u> S	PME 331 (4) Injection Molding S
MFGE 231 (4) Intro to Manuf. Processes <u>F</u> S	Tech Elective	MFGE 462 (4) CAD Using Surfaces WS

ourth Year

PME 491 (WP) (3) Project Research	F	PME 492 (WP) (3) Project Proposal	W	PME 493 (4) Project Implementation	S
PME 471 (4) Adv Materials & Char.	F	PME 431 (4) Adv Materials and Proc	W	PME 461 (4) Tooling for Plastics	S
PME 472 (4) Advanced Composites	F	MFGE 332 (4) Intro To CAM & CNC	F <u>W</u>	Tech Elective	
Tech Elective		Tech Elective			

**Engineering & Design** 

516 High Street, Bellingham, WA 98229

ENGD@wwu.edu | 360.650.3380

http://engineeringdesign.wwu.edu

**Pre-major Advisor: Lisa Ochs** 

360.650.4132 <u>lisa.ochs@wwu.edu</u>

#### **NOTES & EXCEPTIONS**

Math 341 may be substituted for MATH 345. CSCI 141 may be substituted for 140. Students must complete 9-13 credits of tech. electives - seek advising for specifics Full majors must complete PHYS 163 by the end of spring quarter year 3. Full majors must complete PME 342 and ENGR 225 by the end of winter quarter year 3. Student must complete General University Requirements in addition to major courses.

## Polymer Materials Engineering, BS



#### **Admissions**

Students must first be accepted by the university. **The program accepts major applications during winter quarter only.** Accepted students start major coursework spring quarter. Transfer students may apply at the same time if required coursework is complete or in progress.

### Required coursework to apply

#### **Applications due**

#### **Admissions Statistics**

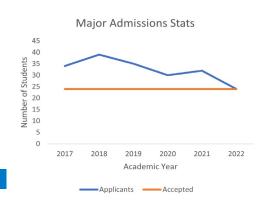
MATH 124	Calculus I	
MATH 125	Calculus II	
CHEM 161	General Chemistry I	
CHEM 162	General Chemistry II	
PHYS 161	Physics w/ Calculus I	
ENGR 101*	Engineering, Design, and Society	
ENGR 115	Engineering Innovation	
ENGR 170	Intro to Materials Science & Engineering	
ENGR 214	Statics	
*waived for transfer students		
students may be enrolled in no more than 3 required courses at application		

Applications are due during winter quarter annually. See website for due date. Accepted students start major coursework spring quarter. Applicants are notified of decisions before spring quarter registration.

## Required short answer questions

s Students must answer a set of short answer questions on the application.

The questions are related to the applicant's career goals, intest in the degree, academic successes/challenges, leadership experience, etc.



## Recommended, but not required to apply

MATH 345/341	Engineering Statistics
PHYS 162	Physics w/ Calculus II
PHYS 163	Physics w/ Calculus III
CSCI 140/141	Programming Fundamentals
ENGR 225	Mechanics of Materials

#### **Technical Electives**

9-13 credits required. See website for list of approved courses and specific rules. Faculty advisors must approve courses not on this list. # of technical electives required varies depending on the declaration year.

## **Faculty Contact Information**

Professor Nicole Larson, larsonn4@wwu.edu Associate Professor John Misasi, misasij@wwu.edu Assistant Professor Peng Gao, gaop@wwu.edu Professor Nicole Hoekstra, hoekstra@wwu.edu Associate Professor Mark Peyron, mpeyron@wwu.edu

udpated:November 2023