

2021-2022
Academic Year

Plastics & Composites Engineering, BS



ABET accredited
 Admissions information - <https://engineeringdesign.wvu.edu/>
 Course offerings subject to change
 Academic advising available - see contact information below
 Major Credits: 150 (GURs not included)
 Pre-major coursework in grey areas/Full major courses in white

Fall Winter Spring

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

Pre-major courses in BOLD are required for major admissions.

Second Year	ENGR 170 (4) Intro Material Science, <u>FW</u>	APPLY TO MAJOR	MAJOR COURSES BEGIN
	ENGR 214 (4) Statics, <u>FW</u>	ENGR 225 (4) Mechanics of Materials, <u>FWS</u>	MFGE 261 (4) Intro to CAD, S
	PHYS 163 (5) Physics w/ Calc III, <u>ES</u>	CSCI 140 or 141 (4) Program. Fund, <u>FWS</u>	PCE 371 (5) Intro to Plastics, <u>FS</u>
		MATH 345 (4) Engineering Statistics, <u>FWS</u>	MFGE 250 (4) Intro to Manuf. Automation, S

Third Year	CHEM 251 (4) Elem. Organic Chemsitry, F	PCE 372 (5) Intro to Composites, W	CHEM 308 (3) Polymer Chemistry, S
	MFGE 341 (4) Quality Assurance, <u>FW</u>	PCE 342 (4) Design of Experiements, <u>WS</u>	PCE 331 (4) Injection Molding, S
	MFGE 231 (4) Intro to Manuf. Processes, <u>ES</u>	EECE 351 (4) Electronics for Engineers, <u>FW</u>	MFGE 462 (4) CAD Using Surfaces, S

Fourth Year	PCE 491 (WP) (2) Project Research, F	PCE 492 (WP) (3) Project Proposal, W	PCE 493 (4) Project Implementation, S
	PCE 471 (4) Adv Materials & Char, F	PCE 431 (4) Adv Materials and Proc, W	PCE 461 (4) Tooling for Plastics, S
	PCE 472 (4) Advanced Composites, F	MFGE 332 (4) Intro To CAM & CNC, <u>FW</u>	Tech Elective
	Tech Elective	Tech Elective	

Engineering & Design

516 High Street, Bellingham, WA 98229

ENGD@wwu.edu | 360.650.3380

<http://engineeringdesign.wvu.edu>

Pre-major Advisor: Lisa Ochs

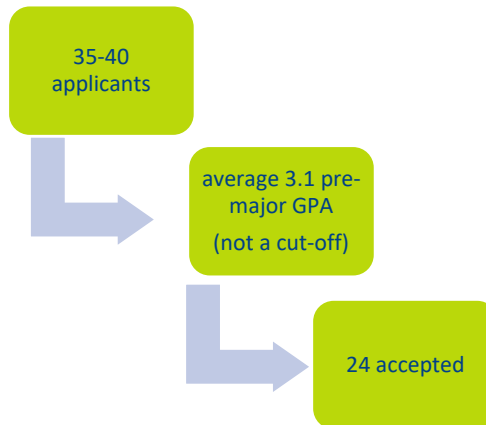
360.650.4132 lisa.ochs@wwu.edu

Notes and Exceptions

Math 341 may be substituted for MATH 345, CSCI 141 may be substituted for 140
 Students must complete 9+ credits of tech. electives - see website for approved courses
 Full majors must complete PHYS 163 by the end of spring quarter year 3
 Full majors must complete PCE 342 and ENGR 225 by the end of winter quarter year 3
 Students must complete General University Requirements in addition to major courses

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		Required essay	Admissions statistics
MATH 124	Calculus I	The program requires applicants to submit a one page or 500 words maximum essay explaining why they want to pursue a degree in PCE.	
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 time of application			
Recommended, but not required to apply		Applications due	
MATH 345	Engineering Statistics	Applications due the first Friday in February every year. Accepted students start major coursework spring quarter. Applicants are notified of decisions before spring quarter registration.	
PHYS 162	Physics w/ Calculus II		
PHYS 163	Physics w/ Calculus III		
CSCI 140	Programming Fundamentals		
CHEM 251	Elementary Organic Chemistry		
ENGR 225	Mechanics of Materials		
		Transfer students	
		Transfer students are encouraged to contact the pre-major advisor to discuss course equivalencies and recommended time to transfer.	

Technical Electives

Majors are required to complete 9-13 technical electives before graduation (# depends on year declared). See website for approved list of elective courses. Faculty advisors must approve courses not on this list.

Faculty Contact Information

Professor Nicole Larson, larsonn4@wwu.edu
 Associate Professor John Misasi, misasij@wwu.edu

Professor Nicole Hoekstra, hoekstra@wwu.edu
 Associate Professor Mark Peyron, mpeyron@wwu.edu