

2024-2025
Academic Year

Polymer Materials Engineering, BS



Major Credits: 151 (GURs not included)

Admissions info: <https://engineeringdesign.wvu.edu/>

Course offerings subject to change

Academic advising available - see contact info below

Pre-major coursework in grey areas

Full major courses in white

Fall	Winter	Spring
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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 (3) Eng, Design, & Society (BCGM) FWS	CHEM 162 (5) Gen Chemistry II FWS	

Second Year	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 WS	MFGE 261 (4) Intro to CAD S
	PHYS 163 (5) Physics w/ Calc III FS	CSCI 141 (4) Program. Fundamentals FWS	PME 371 (5) Intro to Plastics FS
		MATH 341 or 345 (4) Statistics FWS	MFGE 250 (4) Intro Manuf. Automation S

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

Third Year	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 FW	PME 342 (4) Design of Experiments WS	PME 331 (4) Injection Molding S
	MFGE 231 (4) Intro to Manuf. Processes FS	Tech Elective	MFGE 462 (4) CAD Using Surfaces WS
	PME 397B (F) and PME 397A (W) sustainability courses offered as tech electives		

Fourth 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 FW	Tech Elective
	Tech Elective	Tech Elective	

Engineering & Design

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ENGD@wwu.edu | 360.650.3380

<http://engineeringdesign.wvu.edu>

NOTES & EXCEPTIONS

Students must complete **General University Requirements (GURs)** in addition to major courses.

Math 341 may be substituted for MATH 345.

Students must complete 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.

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	Required short answer questions	Admissions Statistics
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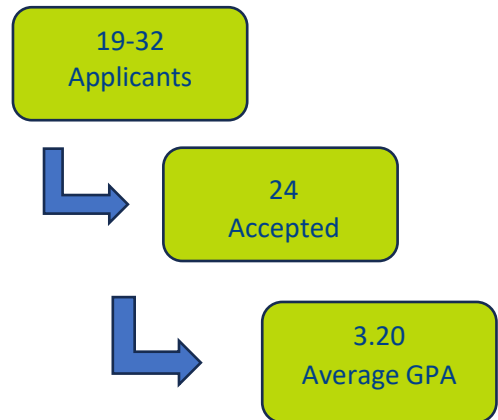
- MATH 124 Calculus I
- MATH 125 Calculus II
- CHEM 161 General Chemistry I
- CHEM 162 General Chemistry II
- PHYS 161 Physics w/ Calculus I
- ENGR 101* Engineering, Design, and Society
- ENGR 115 Engineering Innovation
- ENGR 170 Intro to Materials Science & Engineering
- ENGR 214 Statics

*may be waived for new transfer students
students may be enrolled in no more than 4 required courses at the time of application

Students must answer a set of short answer questions on the application. The questions are related to the applicant's career goals, interest in the degree, academic successes/challenges, leadership experience, etc.

Applications Due

Eligible students apply during winter quarter and those accepted start the major coursework in spring quarter. See the department website for the due date and application instructions.



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

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
- Assistant Professor Peng Gao, gaop@wwu.edu
- Associate Professor John Misasi, misasij@wwu.edu
- Associate Professor Mark Peyron, mpeyron@wwu.edu