

BS in Engineering with a Mechatronics Track

Following this sequence increases the likelihood of completing this degree in four years' time. Dropping courses, adding additional courses, retaking classes, or registering for less than a full course load will delay graduation, so consult your academic advisor before deviating from this suggested sequence. Students may enroll in a course only if they have met all prerequisites for that course. Check the UIW Bulletin for details.

The **bolded** courses indicate the courses required for the Mechatronics Track.

	FALL	SPRING
FR	CHEM 1301 Chemical Principles 1 3 hrs	CHEM 1302 Chemical Principles 2 3 hrs
	MATH 2312 Calculus 1 3 hrs	CHEM 1203 General Chemistry Lab 2 hrs
	ENGL 1311 Composition 1 3 hrs	MATH 2313 Calculus 2 3 hrs
	ENGR 1201 Introduction to Engineering 2 hrs	ENGL 1312 Composition 2 3 hrs
	ENGR 1310 Engineering Graphics CAD 1 3 hrs	ENGR 1312 Engineering Graphics CAD 2 3 hrs
	ECON 2301 Macroeconomics 3 hrs	PEHP 11xx Physical Education 1 hr
	Semester Hours 17 hours	Semester Hours 15 hours
SO	MATH 2322 Linear Algebra 3 hrs	ENGR 2340 Computer Programming 3 hrs
	ENGR 2330 Engineering Prob & Statistics 3 hrs	MATH 2314 Differential Equations 3 hrs
	ENGR 2305 Engineering Physics 1 3 hrs	ENGR 2306 Engineering Physics 2 3 hrs
	ENGR 2105 Engineering Physics 1 lab 1 hr	ENGR 2106 Engineering Physics 2 lab 1 hr
	ENGL 2310 World Literature Studies 3 hrs	PHIL 1381 Introduction to Philosophy 3 hrs
	Second Language 1 3 hrs	Second Language 2 3 hrs
	Semester Hours 16 hours	Semester Hours 16 hours
JR	ENGR 3340 Numerical Methods 3 hrs	ENGR 3430 Engineering Analysis and lab 4 hrs
	ENGR 4375 Thermodynamics 3 hrs	Upper Level Engineering Elective 3 hrs
	Upper Level Engineering Elective 3 hrs	ENGR 3350 Statics 3 hrs
	HIST 1311, 1312, 1321, 1322 3 hrs	Fine Arts 3 hrs
	Mechatronics Track course 3 hrs	Mechatronics Track course 3 hrs
	Semester Hours 15 hours	Semester Hours 16 hours
SR	ENGR 3460 Circuit Analysis and lab 4 hrs	ENGR 3462 Electronics and lab 4 hrs
	RELS 1305, 1315, 1325, or 1327 3 hrs	Upper level RELS or PHIL 3 hrs
	ENGR 3455 Mechanics of Materials and lab 4 hrs	ENGR 4470 Fluid Mechanics and lab 4 hrs
	DWHP 1200 Dimensions of Wellness 2 hrs	ENGR 4490 Senior Capstone 4 hrs
	Mechatronics Track course 3 hrs	Mechatronics Track course 3 hrs
	Semester Hours 16 hours	Semester Hours 18 hours
		Total 129 hours

UIW Core Course Options

FINE ARTS

Any three-hour Performance or History course in Visual Art, Dance, Music, or Theatre

RELIGIOUS STUDIES

Choose from RELS 1305, 1315, 1325, 1327

PHILOSOPHY

PHIL 1381

PHIL or RELS Upper level

3000 level or above

MATH

MATH 1304, 1306, 2303, or higher level

SOCIAL SCIENCE ANTH 1311, CLST 2315,

ECON 2301, GOVT 1315, 1316, PSYC 1301,

SOCI 1311

NATURAL SCIENCE

BIOL 1401, 1402, 2321/2121;

CHEM 1301/1203, 1405, ENSC 1410

GEOL 1401, 1402, 1415, 1420

METR 1430, NUTR 2400

PHYS 1301/1101, 2305/2105

HISTORY

HIST 1311, 1312, 1321, 1322

Mechatronics Track Courses

Choose 2 Courses each in Mechanical and Electrical, approved by Academic Advisor

Electrical

-ENGR 2463 Digital Logic

-ENGR 3364 Signals and Systems

-ENGR 4366 Digital Signal Processing

-ENGR 4368 Intro to Control Systems

Mechanical

-ENGR 3373 Dynamics

-ENGR 4354 Finite Element Analysis

-ENGR 4357 Mechanical Design

-ENGR 4353 Mechanical Vibrations

-ENGR 4373 Heat Transfer

-Or other Electrical/Mechanical elective, approved by Academic Advisor