B.S. Applied Science 2018

Applied Physics Concentration

NOTE: This document is meant to display your degree requirements. The Academic Requirements Report must be used to track progress toward fulfilling all degree requirements. The Academic Requirements Report must show all requirements "satisfied" before your degree is awarded.

Name		Student ID		Concentration	

University Degree Requirements

Overall Credit and GPA Requirements

Total Credits (120)	
Resident Credits (32)	
Stout GPA (2.000)	

Racial and Ethnic Studies (6 credits)

(Select three credits from RES Category A)

(Select three credits from any RES area)

Global Perspective (6 credits)

(Complete a program of university-approved work or study abroad, or 6 credits of global perspective approved courses)

NOTE: *RES and GLP requirements may be met within GE or major course selection.*

General Education Requirements (40-42 credits)

Communication Skills (9 credits)

Analytic Reasoning and Natural Science (14-15 credits)

(At least one math or statistics course and a natural science course with a lab are required)

MATH-153 Calculus I MATH-156 Calculus and Analytic Geometry	or	4-5
MATH-154 Calculus II MATH-157 Calculus and Analytic Geometry II	or	4-5
CHEM-135 College Chemistry I		5

Arts and Humanities (6 credits)

(Must be from at least two categories: Art History/Music Appreciation, Creative/Performing Arts, Foreign Language & Culture, History, Literature, Philosophy)

Social and Behavioral Sciences (6 credits)

(Must be from at least two categories: Anthropology, Economics, Geography, Political Science, Psychology, Sociology)

Cross Disciplinary Issues (3 credits)

(Courses must be selected from the list of approved contemporary issues courses)

Social Responsibility and Ethical Reasoning (3 credits)

(Courses must be selected from the list of approved social responsibility and ethical reasoning courses)

Applied Physics Requirements (59-60 Credits)

APSC-101	Applied Science Profession I		1
APSC-349 APSC-398 APSC-449	* Co-op Field Experience Co-op	or or	1
APSC-401	Applied Science Profession II		1
CEE- 355	Applied Electromagnetics		4
CS-144	Computer Science I		4
CS-145	Computer Science II		4
ME-390 ENGR-275	Thermodynamics Thermodynamics and Heat Transfer	or	3
MATH-250 MATH-255 MATH-275	Diff Equations w/Linear Algebra Differential Equations *and* Linear Algebra	or	3
NANO-230	Characterization of Nanomaterials		3
PHYS-335	Applied Optics and Photonics		3
PHYS-281 PHYS-291 ENGR-292	University Physics I Statics and Dynamics	or	5-6
PHYS-282	University Physics II		5
PHYS-313	Intro to Quantum: Modern Physics		3
PHYS-427	Solid State and Condensed Matter Physics		3
PHYS-413	Quantum Mechanics		3
PHYS-139	Intro to Research Methods in Physics		3
PHYS-439	Advanced Physics Laboratory		3
PHYS-381	Computational Classical Mechanics		3
CEE-205 ENGR-290	Circuit Analysis and Design Circuits And Devices	or	4

***On rare occasions the co-op/field experience may include extra hours to merit additional credits which can be used as electives.**

Technical Electives (21 credits)

Choose any 300 level or higher CEE-, CHEM-, CS-, ENGR-, MATH-, ME-, MSCS-, NANO- courses approved by your program director or a course from the following list to fulfill the 120 credit graduation requirement.

CEE-215	Electronics	4
CEE-235	Signals and Systems	3
CHEM-136	College Chemistry I	5
CS-244	Data Structures	4
ELEC-290	Circuits and Devices	4
ENGL-410	Scientific Communication	3
MFGE-363	Controls and Instrumentation	4
MFGE-391	Fluid Mechanics	3
PHYS-329	Atomic and Nuclear Physics	3
PHYS-489	Advanced Physics Experience	1

Marlann Patterson, Program Director
234D Science Wing- Jarvis Hall
Phone: 715-232-2560
Email: pattersonm@uwstout.edu