# THE UNIVERSITY OF PUGET SOUND

2020-2021 CURRICULUM GUIDE

# PHYSICS/DUAL DEGREE ENGINEERING

DEGREE: BA IN PHYSICS: SAMPLE 3-YEAR PROGRAM

CONTACT PERSON: RAND WORLAND

# A suggested three-year program:

# Fall Semester Classes

Spring Semester Classes

Freshman	Units		Units
SSI 1	1	SSI 2	1
PHYS 121/Lab (NS core)	1	PHYS 122/lab	1
MATH 180 (MA core)	1	MATH 181	1
FL (if needed) or elective	1	FL (if needed) or elective	1

Sophomore	Units		Units
PHYS 221/lab	1	PHYS elective 1 (209 or higher)	1
MATH 280	1	MATH 290	1
CHEM 110/lab OR CHEM 115/lab	1	CHEM 120/lab OR CHEM 230/lab	1
CSCI 161 <sup>1</sup>	1	Approaches core	1

Junior	Units		Units
PHYS 305 <sup>2</sup>	1	PHYS elective 2 (209 or higher)	1
PHYS 351 <sup>2</sup>	1	Elective	1
MATH 301 <sup>2</sup>	1	CN core	1
Approaches core	1	Approaches core	1

# Puget Sound requires a total of 32 units to graduate

# **NOTES:**

- 1) CSCI 161 or equivalent.
- 2) MATH 301 is required (can be concurrent) for PHYS 305 and 351.

Both Columbia University and Washington University (St. Louis) have specific requirements which can be met by choosing core classes appropriately. See the Dual Degree Engineering requirements in the Bulletin.

# Sample 4-year program:

Do a standard Physics program (see *Bulletin*) with the following qualification: In addition, take CHEM 110 and 120 or CHEM 115 and 230 and CSCI 161.

# THE UNIVERSITY OF PUGET SOUND

# COURSE CHECKLIST PHYSICS/DUAL DEGREE ENGINEERING

#### **CORE CURRICULUM**

#### MAJOR REQUIREMENTS

UNIVERSITY CORE	CRS	TERM	GRADE	
SSI 1				PHYS 121
SSI 2				PHYS 122
AR				PHYS 221
НМ				PHYS 305
MA (MATH 180, 181)				PHYS 351
NS (PHYS 121)				PHYS electiv
SL				PHYS electiv
CN				MATH 180 <sup>1</sup>
		1		MATH 101 <sup>1</sup>

#### KEY

SSI1= Seminar in Scholarly Inquiry1 SSI2= Seminar in Scholarly Inquiry2 AR= Artistic Approaches

HM= Humanistic Approaches

MA= Mathematical Approaches NS= Natural Scientific Approaches SL= Social Scientific Approaches

CN= Connections FL= Foreign Language

# Foreign Language Requirement (circle one)

- 1) Two semesters at 101/102 level or One semester at 200+ level
- 2) Proficiency exam (3rd year high school level or 1st year college level)
- 3) AP foreign language score of 4 or 5
- 4) IB higher level foreign language score of 5, 6, or 7

#### **Upper Division Level Requirement**

Three units at the upper division level outside the first major.

# KNOWledge, Identity, and Power Requirement

One course. See Bulletin for details. Courses may also fulfill other program or graduation requirements.

COURSE	UNITS	TERM	GRADE
PHYS 121			
PHYS 122			
PHYS 221			
PHYS 305			
PHYS 351			
PHYS elective 1 (209 or higher)			
PHYS elective 2 (209 or higher)			
MATH 180 <sup>1</sup>			
MATH 181 <sup>1</sup>			
MATH 280			
MATH 290			
MATH 301 <sup>2</sup>			
CHEM 110 (or CHEM 115) 1			
CHEM 120 (or CHEM 230) 1			
CSCI 161 <sup>3</sup>			

# THIS FORM IS NOT AN OFFICIAL GRADUATION ANALYSIS

# NOTES

Before declaring a physics major, students should schedule an appointment with the department chairperson, usually held no later than a student's fourth semester.

- 1) Students with sufficient background and preparation in high school chemistry and calculus may test out of Chemistry and/or Mathematics 180 or 181.
- 2) MATH 301 to be taken prior to, or concurrent with, PHYS 305, 351.
- 3) CSCI 161, or equivalent.
- Majors must maintain a minimum of 2.0 GPA in all courses for both major and prerequisite courses. <u>A higher GPA is necessary for successful admission to the affiliate engineering programs.</u> Students pursuing Dual-Degree Engineering (DDE) should meet with a DDE advisor early in their Puget Sound careers.
- Degree is awarded upon completion of Baccalaureate in Engineering.