

ACADEMIC MAP

Physics, Bachelor of Science



First Year

Fall		Hours
UNIV 1101	University Seminar I	1
COSC 1435	Introduction to Problem Solving with Computers I	4
MATH 2413	Calculus I	4
ENGL 1301	Writing and Rhetoric I	3
HIST 1301	U.S. History to 1865	3
Hours		15

Spring		Hours
UNIV 1102	University Seminar II	1
MATH 2414	Calculus II	4
ENGL 1302	Writing and Rhetoric II	3
	or COMM 1311 or Foundation of Communication	
HIST 1302	U.S. History Since 1865	3
PHYS 2425	University Physics I	4
Hours		15

Second Year

Fall		Hours
PHYS 2426	University Physics II	4
MATH 2415	Calculus III	4
	Language, Philosophy & Culture Core Requirement	3
	Creative Arts Core Requirement	3
POLS 2305	U.S. Government and Politics	3
Hours		17

Spring		Hours
PHYS 3334	Modern Physics I	3
MATH 3315	Differential Equations	3
COSC 1436	Introduction to Problem Solving with Computers II	4
	Social and Behavioral Sciences Core Requirement	3
POLS 2306	State and Local Government	3
Hours		16

Third Year

Fall		Hours
PHYS 3331	Mechanics I	3
PHYS 3332	Electromagnetism	3
PHYS 3490	Selected Topics	3
MATH 3311	Linear Algebra	3
	Elective	3
Hours		15

Spring		Hours
PHYS 4330	Mathematical Methods for Physicists	3
PHYS 4340	Advanced Physics Lab	3
PHYS 3490	Selected Topics	3
	Support Field	3
	Elective	3
Hours		15

Fourth Year

Fall		Hours
PHYS 4335	Quantum Physics	3
PHYS 4161	Physics Research Project	1
PHYS 3333	Thermodynamics	3
	Support Field	3
	Elective	3
	UL Support Elective	3
Hours		16

Spring		Hours
PHYS 4337	Nuclear Physics	3
PHYS 4162	Physics Research Seminar	1
	UL Support Field	3
	UL Support Field	3
	Elective	3
PHYS 4085	Major Field Test in Physics (Must be taken in last semester.)	0
Hours		13
Total Hours		122



CAREER MAP

Physics

Bachelor of Science



Students obtaining the Joint BS in Physics will: possess a broad understanding of physics, understand scientific methods and be able use them to develop and conduct studies of physical systems, communicate physical information effectively at the undergraduate level, whether the communication is in oral or written form, with or without the use of technology. The Joint B.S. Physics degree is a Bachelor of Science degree with a Physics major, provided through the joint efforts of physics faculty both here at TAMU-CC and at other schools in the Texas Physics Consortium (TPC). Interested students are encouraged to visit the TPC website at <http://www.tarleton.edu/tpc/>. Upper-level physics courses can originate at any of the TPC schools, and students at any of the other TPC schools can take them via distance education.

CONTACT INFORMATION

Career Counselor:

Career and Professional Development Center
UC 304 | 361.825.2628
career.center@tamucc.edu

Internship Coordinator:

Barbara Szczerbinska
CI 370 | 361.825.3916
barbara.szczerbinska@tamucc.edu

Department Contact:

Department of Physical and
Environmental Sciences
NRC 1111 | 361.825.6020
jeffery.spirko@tamucc.edu

SKILLS/ATTRIBUTES

- Critical Thinking/Problem Solving
- Teamwork/Collaboration
- Professionalism/Work Ethic
- Oral/Written Communication
- Leadership
- Digital Technology

ADDITIONAL SOURCES OF INFORMATION

1. American Institute of Physics
2. American Association of Physics Teachers
3. Society of Exploration Geophysicists

STUDENT ORGANIZATIONS

- Society of Exploration of Geophysics Student Chapter at TAMUCC
- Student Council of Math and Science Teachers
- Math Club
- SACNAS Chapter at TAMU-CC

CAREER OPTIONS

- Physics Teacher
- Data Analyst
- Accelerator Operator
- Design Engineer
- Applications Engineer
- IT Consultant
- Lab Technician
- Laser Engineer
- Biophysicist