

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW/CHANGE PROGRAM REQUEST</b> <b>Undergraduate Programs</b>		UUPC Approval <u>3/27/23</u> UFS Approval _____ Banner _____ Catalog _____
	Department <u>Physics</u> College <u>Science</u>		
<b>Program Name</b> <b>Bachelor of Science (BS)</b>	<input type="checkbox"/> New Program* <input checked="" type="checkbox"/> Change Program*	<b>Effective Date</b> (TERM & YEAR) <b>Fall 2023</b>	
<p><b>Please explain the requested change(s) and offer rationale below or on an attachment.</b></p> <p>We have found that with our current BS program, we are becoming less competitive with our peers not only in the Charles E Schmidt College of Science, but also within the Florida SUS. Recently we have been getting a greater percentage of transfer students, particularly from the State College system. If not in touch with FAU before they arrive on campus, they can show up with credit counts that are too high for Physics to be a viable option for them. In addition, our BS program currently is at the upper end of the range of required credits in the Florida SUS.</p> <p>To address both problems, we would like to change the credit count for our upper-division courses to be more in line with our peers across the Florida SUS. The majority of our peers have 3 cr upper-division courses in the physics curriculum. Reflecting this in our program will cut 8 credits from our required credits without the cutting of classes. This change will also move us to the middle of the range of required credits in the Florida SUS.</p> <p>The change in lower-division credits noted on the attached form is not associated with the proposed program change. The change in lower-division credits is to correct an oversight in a catalog change that took effect in Fall 2016. At that time, lower-division credits should have been changed from 37 to 34. The correction shown here is consistent with what is required at this time.</p> <p>Total credits for the program remain at 120.</p> <p><small>*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.</small></p>			
<b>Faculty Contact/Email/Phone</b> Korey Sorge ksorge@fau.edu 7-3380		<b>Consult and list departments that may be affected by the change(s) and attach documentation</b> <b>Physics</b>	
<b>Approved by</b> Department Chair _____ College Curriculum Chair _____ College Dean _____ UUPC Chair _____ Undergraduate Studies Dean _____ UFS President _____ Provost _____		<b>Date</b> <u>3-21-23</u> <u>3-21-23</u> <u>3-21-23</u> <u>3/27/23</u> <u>3/27/23</u> _____ _____	

Email this form and attachments to [mianning@fau.edu](mailto:mianning@fau.edu) seven business days before the UUPC meeting.

## Physics

Bachelor of Science (B.S.)

(Minimum of 120 credits required)

The Bachelor of Science (B.S.) degree program is the flagship of the department's undergraduate curriculum. It is designed to help students prepare for careers in physics, related sciences or closely related fields such as engineering. The emphasis is on analytical methods in contemporary theoretical and experimental physics. Students considering graduate work in physics or related areas are strongly encouraged to complete this program.

### Prerequisite Coursework for Transfer Students

Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the [Transition Guides](#).

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

In addition to the undergraduate physics core described above, B.S. candidates must complete the following required courses:

Intermediate Physics Courses		
Survey of Modern Physics	PHY 3101C	4 3
Classical Mechanics	PHY 3221	4 3
Electromagnetism 1	PHY 3323	4 3
Electromagnetism 2	PHY 3324	3
Statistical Physics	PHY 4523	4 3
Quantum Mechanics 1	PHY 4604	4 3
Physical Electronics	PHY 3722C	4 3
Undergraduate Laboratory 1	PHY 3802L	1
Undergraduate Laboratory 2	PHY 4803L	1
Third-Year Physics Seminar	PHY 3932	1
Computational Physics	PHZ 3151C	4 3
Mathematical Methods for Physics	PHZ 4113	4 3
Approved Electives		6
<b>Total</b>		<b>44 36</b>

Overall, this degree program requires ~~37~~ 34 credits of lower-division mathematics and science courses and 44 36 credits of upper-division physics courses. Substitutions for required courses are allowed with prior approval from the department's undergraduate advising committee.