

## PHYSICS PROGRAMS

The Integrated Master of Arts in Teaching (IMAT) program is a high impact, high quality, program designed to generate student desire to attain 6-12 teacher certification and to recruit highly qualified undergraduate STEM majors for the teaching profession. Graduates will earn a Bachelor's Degree (B.S.) in Physics AND a Masters of Arts in Teaching (MAT) through a streamlined program.

<b>PHYSICS</b>	<b>B.S. in Physics with Integrated Master of Arts in Teaching</b>
Core Areas A - E for Science Majors	42
Core Area F	18
(Grade of C or better is required in all Area F courses)	
PHYS 2211, 2212 Principles of Physics I, II	8
MATH 2011, 2012, 2013 Calculus I one hour, II, III	9
CSCI 1301 or 2060 Programming for Science and Engineering	1
Non-Core Courses	6-17
MATH 2011 (if not in D, transfer student)	0-3
CSCI 1301 or 2060 (three hours from F)	3
CHEM 1211, 1212 Principles of Chemistry I, II (if not in D)	0-8
MATH 3020 (Differential Equations)	3
Major Concentration	36
(Grade of C or better is required in all these courses)	
PHYS 3011, 3012 Electronics I, II	8
PHYS 3250 Theoretical Mechanics	4
PHYS 3260 Computational Physics	3
PHYS 3300 Modern Physics	3
PHYS 4010 Advanced Laboratory	3
PHYS 4051, 4052 Electromagnetic Theory I, II	6
PHYS 4310 Thermal Physics	3
PHYS 4530 Mathematical Methods of Physics	3
PHYS 4600 Quantum Mechanics	3
SPED 4002 Instructional Strategies for Teaching Students With Disabilities in General Education	3
Electives	0 - 6
To be chosen with the assistance of the student's faculty advisor.	
Physical Education	4
Successful application to the IMAT degree. A 2.75 overall GPA is required for application and a graduate GPA of 3.0 must be maintained throughout the graduate program.	
EDTD 6364 Integrated Curriculum	3
EDTD 6491 Classroom Management	3

EDTD 6432 Multicultural Education	3
EDTD 6225 Reading Across Curriculum	3
EDTD 6381 or EDUC 6040 Assessment Course	3
EDUC 6020 Foundations Course	3
EDTD 6251 Best Practices in Science Education	3
EDTD 6950 Content Elective	3
EDTD Electives (3) selected with MAT advisor	9
EDTD 6910 Practicum	6
 Total hours for IMAT degree program	 154

Satisfactory Physics Oral Exam Departmental Requirement  
Scaled score of 135 or higher on ETS Major Field Test