



<b>HSS &amp; Free Electives</b>											
<b>EE361, 362</b>											
<b>493</b>											
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- 1 a comprehension of the core areas of physics, including classical and quantum mechanics, electromagnetism, statistical and thermal physics;
- 2 a comprehension of basic mathematics, including differential and integral calculus, linear algebra, differential equations and complex analysis;
- 3 a comprehension of computer programming and chemistry;
- 4 a comprehension of the importance and practice of good ethical standards;
- 5 a recognition of contemporary issues in science and its applications.
- 6 an ability to construct theoretical models, solve problems, design and conduct experiments, as well as to analyze and interpret data;
- 7 an ability to demonstrate their understanding of at least one advanced topic in theoretical or experimental physics;
- 8 an ability to function on multi-disciplinary teams.
- 9 an ability to effectively communicate information in both written and verbal form;
- 10 a recognition of the need for and an ability to engage in life-long learning.
- 11 an ability to use modern physics techniques, skills, and computing tools necessary for physics practice ( use laboratory and workshop equipment to generate data, prepare technical drawings, prepare technical reports, give technical presentations, take notes effectively, write computer programs, use mathematics and/or computational tools and packages to make models ).