

Bachelor of Engineering – Student entering 2020 Fall □ Study Plan □ Application for Candidacy (check one)

| Name | ID: | | Class: | Box S Email: | | |
|--|---------------------------------|---------------------------------|-----------------------------------|--|---------------------------------|---------------------------------|
| Major Concentration Field: General Engineering with a co | oncentration i | n optical engi | neering | Secondary Concentration Field: | | |
| Please print or type. The primary purpose of this form is t track your own progress to the degree. You should revise standard curriculum time schedule. If a choice of course i should be marked TR. An additional study plan will be red | it as needed. s given for th | . Please indica e requiremen | ate the term w t, circle the a | when you expect to take each course (e.g., 2 ppropriate course number. For electives, fil | 015F, 2016S, etc | .). Roman numerals indicate the |
| Term Course <u>TERM I</u> | Credits C 3.0 | Grade | Term | Course <u>TERM III</u> E 126 Mechanics of Solids E 231 Engineering Design III E 245 Circuits and Systems MA 221 Differential Equations PEP 112 Electricity and Magnetism <u>Humanities</u> ¹ | 4.0 2.0 3.0 4.0 3.0 | Grade |
| CAL 103 Writing & Communication Colloquium <u>TERM II</u> <u>Science Elective⁵</u> | 3.0 _ _ 3.0 _ | | | TERM IV E 232 Engineering Design IV | 3.0 | |
| E 122 Engineering Design II | 2.0 | | | PEP 330 Intro. Thermal and Statistical P | hysics 3.0 | |
| MGT 103 Intro. to Entrepreneurial Thinking | 2.0 _ | | | MA 227 Multivariable Calculus | 3.0 | |
| MA 123 Series, Vectors, Functions, Surfaces | 2.0 | | | PEP 209 Modern Optics | 3.0 | |
| MA 124 Calculus of Two Variables | 2.0 | | | PEP 201 Physics III for Engineers | 3.0 | |
| PEP 111 Mechanics CAL 105 Knowledge, Nature, Culture | 3.0 _ 3.0 _ | | | Humanities ¹ | 3.0 | |
| | | | | Original Revision 2 | nd Degree | |
| Student Signature: | | | | Date: | | |
| Faculty Advisor Signature: | | | | Date: | | |
| UG Records Auditor: | | | | Date: | | Revised Ju |

UG Records Auditor:

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Bachelor of Engineering – Student entering 2020 Fall Study Plan Application for Candidacy (check one)

| Faculty Advisor Signature:Date: | Name_ | | ID: | | Class: | Box S | Email: | | | | |
|--|----------|---|-----------------|--------------------|-----------|-----------------------------|------------------------|----------------|---------------|-----------------------|-------------------|
| TERM VI TERM VI E E 471 Transport Phenomena in Solid State 4.0 PEP 523 Engineering Design VI 3.0 E 243 Probability and Statistics for Eng. 3.0 PEP 532 Notation is 3.0 E 244 Probability and Statistics for Eng. 3.0 PEP 510 Modern Optics Lab 3.0 E 244 Materials Processing 3.0 PEP 510 Modern Optics Lab 3.0 Humanities ¹ 3.0 PEP 510 Modern Optics Lab 3.0 PEP 322 Engineering Design VI 2.0 PEP 423 Engineering Design VIII 3.0 E 344 Modeling and Simulation 3.0 PEP 516 Modern Design VIII 3.0 PEP 509 Intermediate Wave and Optics 3.0 Get ² 3.0 Get ² State Engineering Design VII 1.0 Get ² 3.0 Get ² 3.0 Ib 6 ⁴ 400 Senior Innovation I 1.0 Additional Courses Get ² 3.0 Get ² 3.0 Get ² Senior Single Course of Pipsical Education (PE,1) Innovation III 1.0 Sene Single Course of Pipsical Education (PE,1) Innovation II | Major C | oncentration Field: General Engineering with a | concentration | n in optical engir | neering | Secondary Cond | centration Field: | | | | |
| EE 471 Transport Phenomena in Solid State 4.0 PEP 423 Engineering Design VI 3.0 3.0 E 232 Engineering Design V E 243 Probability and Statistics for Eng. 3.0 Automative Statistics for Eng. 3.0 PEP 308 Geometric Optics 3.0 Def 401 Senior Innovation II 1.0 Def 401 Senior Innovation II 1.0 PEP 309 Introductory Optics Lab 3.0 3.0 Cetal Edd Senior Innovation II 1.0 Additional Courses Litural formeering Statistics consens Senior Innovation I 1.0 Def 400 Senior Innovation I 1.0 Def 400 Senior Innovation I 1.0 Litural formeering Statistics Requirement - Four additional humanities classes. At least one must contracts mu | Term | Course | Credits | Grade | Term | Course | | | Credits | Grade | |
| E 321 Engineering Design V 2.0 PEP 577 Iser Theory and Design 3.0 E 243 Probability and Statistics for Eng. 3.0 PEP 510 Modern Optics Lab 3.0 E 344 Materials Processing 3.0 PEP 510 Modern Optics Lab 3.0 PEP 300 Geometric Optics 3.0 PEP 510 Modern Optics Lab 3.0 PEP 322 Engineering Edsign VI 2.0 PEP 510 Floating Design VII 1.0 PEP 325 Engineering Edsign VI 2.0 PEP 516 Photonics I 3.0 PEP 325 Engineering Edsign VII 2.0 PEP 516 Photonics II 3.0 E 345 Modeling and Simulation 3.0 Gef 3.0 Gef PEP 309 Introductory Optics Lab 3.0 Gef 3.0 Gef IDE ⁴ 400 Senior Innovation I 1.0 Additional Gourses Gef 3.0 IDE ⁴ 400 Senior Innovation I 1.0 Additional Gourses Credits Grade PEP 200 PE PF9730, PEP30. General Education Innovation I 1.0 Additional Gourses PE 200 PE PE 1. Uburshite Requirement – Four additional humanities classes. At least one PE 200 PE PE 200 PE PE 200 | | TERM V | | | | | TERM VII | | | | |
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| E 344 Materials Processing 3.0 PEP 510 Modem Optics Lab 3.0 PEP 500 Geometric Optics 3.0 Humanities ¹ 3.0 PEP 525 Engineering Design VII 2.0 PEP 510 Modem Optics Lab 3.0 PEP 525 Engineering Design VII 2.0 PEP 525 Engineering Design VII 3.0 PEP 525 Engineering Design VII 2.0 PEP 525 Engineering Design VII 3.0 E 345 Modeling and Simulation 3.0 PEP 530 Intermediate Wave and Optics 3.0 PEP 300 Introductory Optics Lab 3.0 GE ² 3.0 PEP 300 Introductory Optics Lab 3.0 GE ² 3.0 IDE ⁴ 400 Senior Innovation I 1.0 Additional Courses ² 3.0 IDE ⁴ 400 Senior Innovation I 1.0 Additional Courses ² Credits Grade PE 2. Optical Engineering Exclusion Electives should be chosen from PEF542, PEP553, PEP570, PEP53, PEP570, PEP53, PEP570, PEP53, PEP570, PEE | | E 321 Engineering Design V | 2.0 | | | PEP 577 Laser Th | neory and Design | | 3.0 | | |
| PPP 308 Geometric Optics 3.0 Humanities ¹ 3.0 Humanities ¹ 3.0 IDE ⁴ 401 Senior Innovation II 1.0 PEP 322 Engineering Design VI 2.0 PEP 424 Engineering Design VIII 3.0 E 335 Engineering Economics 4.0 PEP 516 Photonics II 3.0 E 4345 Modeling and Simulation 3.0 PEP 509 Intermediate Wave and Optics 3.0 Ge ² 3.0 Ge ² 3.0 Ge ² 3.0 Ge ² 3.0 IDE ⁴ 400 Senior Innovation I 1.0 Additional Courses Additional Courses Notes: 1.0 Additional Courses Credits Grade Tem Course Credits Grade Tem Course Credits Grade PE PE 200 PE PE PE 200 </td <td></td> <td>E 243 Probability and Statistics for Eng.</td> <td>3.0</td> <td></td> <td></td> <td>PEP 515 Photor</td> <td>nics I</td> <td></td> <td>3.0</td> <td></td> <td></td> | | E 243 Probability and Statistics for Eng. | 3.0 | | | PEP 515 Photor | nics I | | 3.0 | | |
| Humanities ¹ 3.0 IDE ⁴ 401 Senior Innovation II 1.0 PFP 322 Engineering Design VI 2.0 PEP 5424 Engineering Design VIII 3.0 E 355 Engineering Economics 4.0 PEP 516 Photonics II 3.0 PEP 5309 Intermediate Wave and Optics 3.0 PEP 516 Photonics II 3.0 PEP 509 Intermediate Wave and Optics 3.0 GE ³ 3.0 GE ³ 3.0 GE ³ 3.0 IDE ⁴ 400 Senior Innovation I 1.0 Additional Courses Notes: 1.0 Additional Courses IDE ⁴ 400 Senior Innovation II 1.0 S. Optical Electives - chosen by the student - can be any 3 or 4 credit course used towards a minor, major concentration, research, Independent study, language courses, or a course taked none metrose, or redits Grade PE 200 PE S. Optical Engineering robiolis can bake any of the following BIO 281 Blobary, CH towards and cost stores of Physical Education requirements. 6.PE Requirement-AII students must complete a minimum of four sensetters of Physical Education requirements. Student Signature: | | E 344 Materials Processing | 3.0 | | | | • | | 3.0 | | |
| TERM VI TERM VIII M PEP 322 Engineering Design VI 2.0 PEP 424 Engineering Design VIII 3.0 E 355 Engineering Design VI 2.0 PEP 516 Photonics II 3.0 E 355 Engineering Design VIII 3.0 3.0 3.0 PEP 509 Intermediate Wave and Optics 3.0 GE ³ 3.0 PEP 309 Introductory Optics Lab 3.0 GE ³ 3.0 Ge ¹ 3.0 JDE ⁴ 402 Senior Innovation II 1.0 I. Humanities Requirement – Four additional humanities classes. At least one must be at the 300 or 400 level, and courses must cover at least to one from PEP542, PEP533, PEP570, PE Required Courses' 1. Humanities Requirement – Four additional Electives should be chosen from PEP542, PEP533, PEP570, Term Course Credits Grade PEF578, PEP579. S. General Education Electives - chosen by the student – can be any 3 or 4 credit course used towards a minor, major concentration, research, Independent study, Language course, or a course take noncurrently with IDE 401 in Term VII as determined by the engineering presman. PE 200 PE 4. DE 400 can be taken concurrently with IDE 401 in Term VII as determined by the engineering pregmarm. Septe Requirement- All students must complete a minimum of four senseters of Physical Education requirements. 5. Optical Engineering students can take any of the following: B | | • | | | | Humanities ¹ _ | | | 3.0 | | |
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| PEP 509 Intermediate Wave and Optics 3.0 .0 .0 PEP 309 Intermediate Wave and Optics 3.0 .0 .0 PEP 309 Intermediate Wave and Optics Lab 3.0 .0 .0 GE ³ 3.0 .0 .0 .0 IDE ⁴ 400 Senior Innovation I 1.0 .0 .0 Notes: 1. 1.0 .0 .0 2. Optical Engineering Enchical Electives should be chosen from PEP542, PEP533, PEP570, PEP579, PEP579, PEP579, Stape579. .0 3. General Education Electives - chosen by the student - can be any 3 or 4 credit course used courses or a course taken during international experience. 4. IDE 400 to be taken concurrently with IDE 401 in Term VII as determined by the engineering students can take any of the following: BIO 281 Biology, CH 115 Chemistry II, NANO 200 Unit to Nanotechnology. EUS20 Quantitative Biology (web sourse), PE 351 Introduction to Astronomy, PEP 351 Planetary Science, or PEP SPE Requirement- All students must complete a minimum of four semesters of Physical Education in varity and club sports may be used to satisfy all four of the Physical Education requirements. Source Implement Course Implement Science | | E 345 Modeling and Simulation | 3.0 | | | Technical Electi | ive² | | 3.0 | | |
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| Notes: 1. Humanities Requirement Four additional humanities classes. At least one must be at the 100 or 200 level, at least one must be at the 300 or 400 level, and courses must cover at least two different disciplines within CAL. PE Required Courses? 2. Optical Engineering Technical Electives should be chosen from PEP542, PEP553, PEP579. Term Course Credits Grade 9. Optical Engineering Technical Electiveschosen by the student - can be any 3 or 4 credit course used towards a minor, major concentration, independent study, language courses, or a course taken during international experience. PE 200 PE PE PE 200 PE PE PE PE 200 PE PE PE 200 PE PE PE 200 PE | | GE ³ | 3.0 | | | IDE ⁴ 402 Senior | Innovation III | | 1.0 | | |
| 1. Humanities Requirement Four additional humanities classes. At least one must be at the 100 or 200 level, at least one must be at the 300 or 400 level, and courses must cover at least two different disciplines within CAL. | | IDE ⁴ 400 Senior Innovation I | 1.0 | | Additio | Additional Courses | | | | | |
| must be at the 100 or 200 level, at least one must be at the 300 or 400 level, and courses must cover at least two different disciplines within CAL. PE Required Courses? 2. Optical Engineering Technical Electives should be chosen from PEP542, PEP553, PEP570, PEP578, PEP579. Term Course Credits Grade 3. General Education Electives - chosen by the student - can be any 3 or 4 credit course used towards a minor, major concentration, research, independent study, language courses, or a course taken during international experience. PE 200 PE PE 200 PE 4. IDE 400 can be taken concurrently with IDE 401 in Term VII as determined by the engineering program. Optical Engineering students can take any of the following: BIO 281 Biology, CH 116 Chemistry II, NANO 200 Intro to Nanotechnology, EN250 Quantitative Biology (web course), PEP 151 Introduction to Astronomy, PEP 351 Planetary Science, or PEP 336 Intro to Astronomy, PEP 351 Planetary Science, or PEP 336 Intro to Astronomy, SEP 351 Planetary Science, or PEP 336 Intro to Astronomy, Signature: Date: Date: Revised June 2020 Faculty Advisor Signature: Date: Date: Revised June 2020 Revised June 2020 | Notes: | | | | | | | | | | |
| and courses must cover at least two different disciplines within CAL. PE Required Courses ⁷ 2. Optical Engineering Technical Electives should be chosen from PEP542, PEP553, PEP570, PEP579. Term Course Term Course Credits Grade Term Course Credits Grade 3. General Education Electives – chosen by the student – can be any 3 or 4 credit course used towards a minor, major concentration, research, independent study, language courses, or a course taken during international experience. PE 200 PE PE 200 PE 4. IDE 400 can be taken concurrently with IDE 401 in Term VII as determined by the engineering program. 6.PE Requirement- All students must complete a minimum of four semesters of Physical Education (P.E.) in non-repeating courses. No credit or grades are awarded for P.E. classes. Participation in varsity and club sports may be used to satisfy all four of the Physical Education requirements. Student Signature: | | · · · · · · · · · · · · · · · · · · · | | | | | | | | | |
| 2. Optical Engineering Technical Electives should be chosen from PEP542, PEP553, PEP570, PEP579. Term Course Credits Grade Term Course Credits Grade 3. General Education Electives – chosen by the student – can be any 3 or 4 credit course used towards a minor, major concentration, research, independent study, language courses, or a course taken during international experience. A. IDE 400 can be taken concurrently with IDE 401 in Term VII as determined by the engineering students can take any of the following: BIO 281 Biology, CH 116 Chemistry II, NANO 200 Intro to Nanotechnology, EN250 Quantitative Biology (web course), PEP 151 Introduction to Astronomy, PEP 351 Planetary Science, or PEP 336 Intro to Astrophysics and Cosmology. G.PE Requirement- All students must complete a minimum of four semesters of Physical Education (P.E.) in non-repeating courses. No credit or grades are awarded for P.E. classes. Participation in varsity and club sports may be used to satisfy all four of the Physical Education requirements. Student Signature: | | | | /el, | | ired Courses ⁷ | | | | | |
| PEP578, PEP579. 3. General Education Electives - chosen by the student - can be any 3 or 4 credit course used towards a minor, major concentration, research, independent study, language courses, or a course taken during international experience. PE 200 PE | | | | 2. PFP553. PFP57 | | | Credits Grade | Term | Course | Credits (| Grade |
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| engineering program. 5. Optical Engineering students can take any of the following: BIO 281 Biology, CH 116 Chemistry II, NANO 200 Intro to Nanotechnology, EN250 Quantitative Biology (web course), PEP 151 Introduction to Astronomy, PEP 351 Planetary Science, or PEP 336 Intro to Astrophysics and Cosmology. Ctudent Signature: | | | it study, langu | age courses, or a | | PE 200 | PE | | PE 200 | PE | |
| engineering program. 5. Optical Engineering students can take any of the following: BIO 281 Biology, CH 116 Chemistry II, NANO 200 Intro to Nanotechnology, EN250 Quantitative Biology (web course), PEP 151 Introduction to Astronomy, PEP 351 Planetary Science, or PEP 336 Intro to Astrophysics and Cosmology. Student Signature: | 4. IDE 4 | 00 can be taken concurrently with IDE 401 in Term V | II as determine | ed by the | 6.PE Re | quirement- All stude | ents must complete a | minimum of | four semeste | ers of Physical Educa | ition |
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| 336 Intro to Astrophysics and Cosmology. Original Revision 2 nd Degree Student Signature: | 116 Che | mistry II, NANO 200 Intro to Nanotechnology, EN25 | Quantitative | Biology | varsity a | and club sports may | be used to satisfy all | four of the Pl | nysical Educa | ation requirements. | |
| Student Signature: | | | | , | Г | Original | Revision | | ogree | | |
| Faculty Advisor Signature: | Studer | nt Signature: | | | L | - | | | - | | |
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| UG Records Auditor: Date: | | | | | | | | | | | |