

**BS: Liberal Arts and Engineering Studies (LAES)**  
**2019-2020 CONCENTRATION and STUDY ABROAD DECLARATION**

Consult the [2019-20 Catalog](#) for degree requirements. Use BLACK INK ONLY.

Revision

Student Name: \_\_\_\_\_ ID#: \_\_\_\_\_ Date: \_\_\_\_\_

Career Objective: \_\_\_\_\_ Expected Grad Term: \_\_\_\_\_

**Important Note:** This form must be submitted at the time of entry into the LAES Program. Before submission, an LAES Director must approve all courses. A revision should be submitted (if necessary) FOUR QUARTERS PRIOR to graduation along with a graduation check with the LAES advisor. Failure to meet this requirement may delay degree issuance.

**Form Instructions:** Mark an X to select ONE Engineering Concentration OR list ICS courses. Mark an X to select ONE Liberal Arts Concentration OR list ICS courses. List Study Abroad/Global Perspectives courses. List electives and/or substitutions as necessary. Mark the REVISION box if this replaces a previous submission. Sign and date, meet with an LAES Director to obtain approval signature, then return completed form to the LAES Program Office in Bldg. 47, Room 34G.

ENGINEERING CONCENTRATION – 34 units (8 units must be at the 300-400 level)				LIBERAL ARTS CONCENTRATION – 24 units (12 units must be at the 300-400 level)				INDIVIDUALIZED COURSE OF STUDY (Mark an X to select an ICS INSTEAD of a concentration)																																						
<input type="checkbox"/> <b>IME (SYSTEM DESIGN)–34-35 UNITS</b> IME 101 Intro to Industrial/Manufacturing Eng 1 IME 223 Process Improvement Fundamentals 4 IME 239 Industrial Costs and Controls 3 IME 301 Operations Research I 4 IME 303 Project Organization & Management 4 IME 314 Engineering Economics 3 IME 319 Human Factors Engineering 3/4 OR IME 320 Human Factors, Technology (Area F) <sup>1</sup> IME 326 Engineering Test Design and Analysis 4 IME 420 Simulation 4 IME 443 Facilities Planning and Design 4 List Substitutions Here: _____				<input type="checkbox"/> <b>INTERACTIVE COMMUNICATION (CINEMATIC FOCUS)–24 UNITS</b> ENGL 371 Film Styles and Genres (C4) <sup>1</sup> 4 ENGL 411 New Media Arts I 4 TH 210 Introduction to Theatre (C3) <sup>1</sup> 4 Approved Electives—select from the following: 12 COMS 311, COMS 385, COMS 419, ENGL 372, ENGL 412, POLS 470 List Substitutions Here: _____				<input type="checkbox"/> <b>ENGINEERING ICS–34 UNITS</b> Note: If a pre-defined Concentration does NOT meet your career objective, list 34 units (12 at the 300-400 level). Courses must be from at least two engineering disciplines. <table border="1" style="width:100%"> <thead> <tr> <th>Course #</th> <th>Course Title</th> <th>Units</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Course #	Course Title	Units																																	
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<input type="checkbox"/> <b>ELECTRICAL ENGINEERING (POWER)–34 UNITS</b> EE 111/151 Intro to Electrical Engineering/Lab 1/1 EE 112 Electric Circuit Analysis I 2 EE 211/241 Electric Circuit Analysis II/Lab 3/1 EE 212/242 Electric Circuit Analysis III/Lab 3/1 EE 255/295 Energy Conversion Electromagnetic/Lab 3/1 EE 335/375 Electromagnetic Fields & Trans/Lab 4/1 EE 406 Power Systems Analysis I 4 EE 407/444 Power Systems Analysis II/Lab 4/1 Advisor Approved Power Technical Elective 4 List Elective Course # Here: _____ List Substitutions Here: _____				<input type="checkbox"/> <b>INTERACTIVE COMMUNICATION (THEATRICAL FOCUS)–24 UNITS</b> ENGL 411 New Media Arts I 4 TH 210 Introduction to Theatre (C3) <sup>1</sup> 4 TH 227 Theatre History I 4 OR TH 228 Theatre History II Approved Electives—select from the following: <sup>2</sup> 12 ENGL 412, ISLA 320, TH 220, TH 230, TH 330, TH 360, TH 390, TH 430, TH 434 List Substitutions Here: _____				<input type="checkbox"/> <b>LIBERAL ARTS ICS–24 UNITS</b> Note: If a pre-defined Concentration does NOT meet your career objective, list 24 units (12 at the 300-400 level). You may complete a pre-approved liberal arts, interdisciplinary or cross-college minor, with half of the units from the CLA. <table border="1" style="width:100%"> <thead> <tr> <th>Course #</th> <th>Course Title</th> <th>Units</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Course #	Course Title	Units																																	
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<input type="checkbox"/> <b>COMPUTER GRAPHICS–34 UNITS</b> CSC/CPE 101 Fundamentals of Computer Science I 4 CSC/CPE 202 Data Structures 4 CSC/CPE 203 Prj-Based Obj-Orien Prgm and Design 4 CSC/CPE 123 Introduction to Computing 4 CSC 225 Intro to Computer Organization 4 CSC 303 Teaching Computer Science 2 CSC 348 Discrete Structures 4 CSC/CPE 357 Systems Programming 4 CSC/CPE 471 Introduction to Computer Graphics 4 List Substitutions Here: _____				<input type="checkbox"/> <b>PUBLISHING TECHNOLOGY–24 UNITS</b> GRC 101 Intro to Graphic Communication 3 GRC 201 Digital Publishing Systems 3 GRC 211 Substrates, Inks and Toners 4 ISLA 303 Values and Technology (C4) <sup>1</sup> 4 OR PHIL 341 Professional Ethics OR PHIL 337 Business Ethics Approved Electives—select from the following: 10 COMS 317, GRC 316, GRC 328, GRC 329, GRC 402 List Substitutions Here: _____				<input type="checkbox"/> <b>STUDY ABROAD OR GLOBAL PERSPECTIVES—8 UNITS</b> Note: LAES requires a combined 8 units of Study Abroad or Global Perspectives. If upper-division GE courses or lower-division Study Abroad courses are used in this section, additional upper- or lower-division units may be needed to meet university requirements.																																						
<input type="checkbox"/> <b>USABILITY STUDIES–34 UNITS</b> CSC/CPE 101 Fundamentals of Computer Science I 4 CSC/CPE 202 Data Structures 4 CSC/CPE 203 Prj-Based Obj-Orien Prgm and Design 4 CSC 225 Intro to Computer Organization 4 CSC 303 Teaching Computer Science 2 CSC 307 Intro to Software Engineering 4 CSC 348 Discrete Structures 4 CSC/CPE 357 Systems Programming 4 CSC 484 User-Centered Interface Design/Dev 4 List Substitutions Here: _____				<input type="checkbox"/> <b>TECHNICAL COMMUNICATION–24 UNITS</b> COMS 317 Technology & Human Communication 4 ENGL 317 Technical Editing 4 ENGL 319 Information Design and Production 4 Approved Electives—select from the following: 12 COMS 213, COMS 301, ENGL 310, ISLA 303, PHIL 337 OR PHIL 341 List Substitutions Here: _____				<table border="1" style="width:100%"> <thead> <tr> <th>Course #</th> <th>Course Title</th> <th>Units</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			Course #	Course Title	Units																																	
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<sup>1</sup> Required in Major; also satisfies GE

<sup>2</sup> No more than one lower division course