Environmental and Sustainable Engineering Planning Checklist (B.S.)

107 CREDIT PROGRAM

NAME: ______________________________ ID ____________________________

**General Education**
- Art
- Challenges in the 21st Century
- Foreign Language
- Humanities
- International Perspectives
- Math
- Natural Sciences
- Social Science
- US History
- Writing and Critical Inquiry

**Environmental and Sustainable Engineering Core Courses (44 Credits)**
- IESE 110: Intro to Engineering (2) ** [Fall]
- IESE 201: Statics (3)
- IESE 202: Strength of Materials (3) [Spring]
- IESE 221: Intro to Sustainable Engineering (3)
- IESE 301: Introduction to ESE (3) [Fall]
- IESE 321: Engineering Applications in Sustainable Design (3) [Fall]
- IESE 332: Air Quality Modeling (3) [Spring]
- IESE 351: Fluid Mechanics (3) [Fall]
- IESE 381: Energy Engineering (3) [Spring]
- IESE 411: Water and Wastewater Treatment (3) [Fall]
- IESE 412: Advanced Wastewater Engineering (3) [Spring]
- IESE 431: Air Pollution Control (3) [Fall]
- IESE 451: Water Resources Engineering (3) [Fall]
- IESE 471: Hazardous Waste Management (3) [Fall]
- IESE 497: Senior Capstone Design (3) [Spring/Seniors]

**Interdisciplinary Core Courses: Atmospheric & Env, Env Health Sci, Comp Sci. (20 Credits)**
- AATM 210: Atm. Structure, Thermodynamics, and Circulation (3) [Fall]
- AENV 250: Sustain. Develop. Energy and Resources (3) [Spring]
- HSPH 321: Global Env. Issues & Effect on Human Health (3)
- HEHS 560: Sustainability, Green Design & Public Health (3) [Seniors]
- ICSI 201: Intro to Computer Science (4)
- ICSI/IECE 210: Discrete Structures (4)

**Mathematics and Science Courses (34 Credits)**
- ACHM 115: General Chemistry I & Lab (4) ** [Fall]
- ACHM 116: General Chemistry II & Lab (4) ** [Spring]
- ABIO 130: Biology I (3)
- ABIO 201: Introduction to Biological Investigations I (1) [Fall]
- APHY 140/142: Physics I: Mechanics (3)
- APHY 145: Physics Lab I (1) [Fall]
- AMAT 112: Calculus I (4) **
- AMAT 113: Calculus II (4) **
- AMAT 214: Calculus of Several Variables (4)
- AMAT 311: Ordinary Differential Equations (3)
- AMAT 370: Prob. & Stat. for Eng. & the Sci (3) [Fall]

**ESE Electives (9 Credits)**
- AATM 200: Natural Disasters (3) [Fall]
- AATM 301: Surface Hydrology and Hydrometeorology (3) [Fall]
- AATM 304/304Z: Air Quality and Pollution Policy (3)
- AGOG 360: Introduction to Geographic Information Systems (3)
- AGOG 496: Geographic Information Systems (3)
- HSPH 323: Environmental Lab. Perspectives in Public Health (3)
- EHS 520: Environmental Chemistry (3)
- AUSP 452: CAD in Planning (3)
- AENV 315: Environmental Statistics and Computation (4) [Spring]
- ESE 452: Groundwater Hydrology (3)
- AATM 210, AMAT 112, APHY 140
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**Grade of C or better required to progress in major**

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**The map above reflects ALL general education requirements. It is suggested that students work with their advisors to find general education courses that fulfill multiple categories**

AVN: ________________________________

Course recommendations: