## MASTER OF SUSTAINABLE ENERGY AND ENVIRONMENTAL MANAGEMENT

The Master of Sustainable Energy and Environmental Management (MSEEM) curriculum is a multidisciplinary program with courses taught in schools across Georgia Tech including Public Policy, Business, City and Regional Planning, Civil and Environmental Engineering, and Economics, among others. MSEEM can be completed either full time (4-4-2 courses in a single year) or part time (2-2-1 courses each year for 2 years).

| Program o | of Study |
|-----------|----------|
|-----------|----------|

| Code                       | Title   | Credit<br>Hours |  |
|----------------------------|---|-----------------|--|
| Required courses           |   |                 |  |
| PUBP 6312                  | Economics of Environmental Policy                               | 3               |  |
| PUBP 6360                  | Sustainable Energy & Environmental<br>Management                | 3               |  |
| PUBP 6801                  | Research Paper  | 6               |  |
| Electives <sup>1</sup>     |   |                 |  |
| Quantitative M             | 1ethods   | 6               |  |
| PUBP 6114                  | Applied Policy Methods and Data Analysis                        |                 |  |
| PUBP 6120                  | Cost Benefit Analysis for Policy                                |                 |  |
| PUBP 6218                  | Quantitative Models in Public Policy                            |                 |  |
| PUBP 6530                  | Introduction to Geographic Information Systems                  |                 |  |
| PUBP 8200                  | Advanced Research Methods I                                     |                 |  |
| PUBP 8205                  | Advanced Research Methods II                                    |                 |  |
| PUBP 8751                  | Big Data and Public Policy                                      |                 |  |
| PUBP 8803                  | Special Topics (Cost Benefit Analysis)                          |                 |  |
| PUBP<br>8803/<br>ISYE 8813 | Special Topics (Life Cycle Cost Analysis)                       |                 |  |
| CEE 6355                   | Industrial Ecology in Environmental<br>Engineering              |                 |  |
| CEE 6790                   | Air Pollution Physics and Chemistry                             |                 |  |
| CETL 6490                  | Advanced Environmental Data Analysis                            |                 |  |
| CP 6541                    | Environmental Analysis Using GIS                                |                 |  |
| EAS 6200                   | Environmental Geochemistry                                      |                 |  |
| EAS 6490                   | Advanced Environmental Data Analysis                            |                 |  |
| EAS 6500                   | Climate and Global Change                                       |                 |  |
| MGT 6203                   | Data Analytics in Business                                      |                 |  |
| MGT 6314                   | Understanding Markets with Data Science                         |                 |  |
| MGT 6451                   | Business Intelligence and Analytics                             |                 |  |
| MSE 6759                   | Materials in Environmentally Conscious Design and Manufacturing |                 |  |
| Sustainable Er             | nergy & Environmental Management                                | 9               |  |
| PUBP 6120                  | Cost Benefit Analysis for Policy                                |                 |  |
| PUBP 6300                  | Earth Systems   |                 |  |
| PUBP 6310                  | Environmental Issues  |                 |  |
| PUBP 6326                  | Environmental Values and Policy Goals                           |                 |  |

|    | PUBP 6327         | Sustainability and Environmental Policy                    |   |
|----|-------------------|--|---|
|    | PUBP 6330         | Environmental Law  |   |
|    | PUBP 6350         | Energy Policy & Markets                                    |   |
|    | PUBP 6352         | Utility Regulation and Policy                              |   |
|    | PUBP 6701         | Energy Technology Policy                                   |   |
|    | PUBP 8803         | Special Topics (Enviornmental Finance)                     |   |
|    | PUBP 8803         | Special Topics (Smart Cities)                              |   |
|    | PUBP 8833         | Special Topics (Utility Regulation & Policy)               |   |
|    | PUBP              | Special Topics (Life Cycle Cost Analysis)                  |   |
|    | 8803/             |  |   |
|    | ISYE 8813         | Consider Tonics (Consum Efficiency 9                       |   |
|    | AE<br>4803/8803   | Special Topics (Energy Efficiency & Environmental Impacts) |   |
|    |                   | Environmental Systems I                                    |   |
|    |                   | Issues in Sustainable Construction Technology              |   |
|    |                   | Zero Energy Housing  |   |
|    |                   | Smart and Sustainable Cities                               |   |
|    | CEE 4300          | Environmental Engineering Systems                          |   |
|    |                   | Environmental Systems Design Project                       |   |
|    |                   | Environmental Impact Assessment                            |   |
|    |                   | Fundamentals of Environmental Modeling and                 |   |
|    |                   | Mathematics  |   |
|    | CEE 6345          | Sustainable Engineering                                    |   |
|    | CEE 6390          | Air Pollutant Formation and Control                        |   |
|    | CEE 6625          | Transportation, Energy, and Air Quality                    |   |
|    | CEE 6790          | Air Pollution Physics and Chemistry                        |   |
|    | CHBE<br>4030/8803 | Chemical Engineering of Energy Systems                     |   |
|    | CHBE 6743         | Fundamentals and Challenges for a                          |   |
|    |                   | Sustainable Chemical Enterprise                            |   |
|    | CP 6190           | Introduction to Climate Change Planning                    |   |
|    | CP 6213           | Urb Env Plan & Design                                      |   |
|    | CP 6214           | Environmental Planning and Impact<br>Assessment            |   |
|    | CP 6217           | Climate Change and the City                                |   |
|    | CP 6233           | Sustainable Urban Development                              |   |
|    | EAS 6132          | Introduction to Climate Change                             |   |
|    | EAS 6135          | Introduction to Complex Environmental Systems              |   |
|    | EAS 6200          | Environmental Geochemistry                                 |   |
|    | EAS 6500          | Climate and Global Change                                  |   |
|    | ECON 6380         | Economics of Natural Resources and the<br>Environment      |   |
|    | ECON 7032         | Macroeconomics of Innovation                               |   |
|    |                   | The Environment in World History                           |   |
|    |                   | Energy and International Security                          |   |
|    |                   | Sustainable Business Practicum                             |   |
|    |                   | Business Strategies For Sustainability                     |   |
| Pc | licy & Mana       | _  | 3 |
|    |                   | Ethics, Epistemology, and Public Policy                    |   |
|    |                   | Fundamentals of Policy Processes                           |   |
|    |                   | Public Management  |   |
|    |                   | Policy Implementation and Administration                   |   |
|    | LORL 0110         | Microeconomics for Policy Analysis                         |   |

| PUBP 6118 | Public Finance Policy                     |
|-----------|---|
| PUBP 6201 | Public Policy Analysis                    |
| PUBP 6221 | Policy and Program Evaluation             |
| PUBP 6314 | Policy Tools for Environmental Management |
| PUBP 6326 | Environmental Values and Policy Goals     |
| PUBP 6327 | Sustainability and Environmental Policy   |
| PUBP 6330 | Environmental Law                         |
| PUBP 6350 | Energy Policy & Markets                   |
| PUBP 6352 | Utility Regulation and Policy             |
| PUBP 6354 | Climate Policy                            |
| PUBP 6701 | Energy Technology Policy                  |
| PUBP 8540 | Advanced Environmental Policy             |
| CP 6223   | Policy Tools for Environmental Management |
| CP 6261   | Environmental Law                         |
|           |   |

Total Credit Hours 30

## Other program guidelines:

- Students may take one section of PUBP 6801 pass/fail. The other section of PUBP 6801 must be for letter grade. All other courses must be taken on a letter-grade basis.
- Students taking two sections of PUBP 6801 in the final term to complete the program are considered to meet full-time requirements for the summer. One section of PUBP 6801 must be for letter-grade.
- All courses used to satisfy the course requirements must be completed with a grade of C (2.00) or better.
- A maximum of 3 credit hours of transfer credit may be used to satisfy the course requirements. This includes courses taken at another institution or credit earned through the AP or IB program, assuming the scores meet Georgia Tech minimum standards.

Hours must include two (2) quantitative courses, three (3) SEEM courses, and one (1) policy & management course.