

Directions for Undergraduate Program Director Reports:

- Talk to students in your major, ask around if there are any current academic issues. (ex: class conflicts within the major, issues with professors, etc)
- 2. Look at Degree Navigator, write down the course requirements
- Formulate a list of things you would like to know about the program (corporate connections with the university, current research projects, opportunities for students to get involved, etc)
- 4. Email Undergraduate Program Director and Arrange Appointment
- 5. Fill out Undergraduate Report Sheet
- 6. email to vicepresident.sgc.council@gmail.com and complete by December 4th



Name: Morgan Mark

Major: Bioenvironmental Engineering

Date: October 22, 2019

Semester: Third Semester

Undergraduate Program Director: Dr. Uta Krogmann

UPD Contact Information:

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I. Major Options - What options are offered within the major? How do they differ?

There are several concentrations within the Bioenvironmental Engineering (BEE) major that students can specialize in including: air pollution control, bioremediation, environmental health and safety, hazardous waste management, site remediation, solid waste management, renewable energy generation, stormwater treatment, and water and wastewater treatment.

Through introductory courses and upper level technical electives, students have the opportunity to explore the wide variety of fields that fall under the scope of BEE. While all related and having the same ultimate goal of either repairing or safeguarding the environment, there are certain nuances within each concentration that make them unique.

Current BEE website: http://envsci.rutgers.edu/academics/bee/

For more information, please contact the BEE Undergraduate Program director: Uta Krogmann Tel: 848-932-5729 Email: krogmann@envsci.rutgers.edu

II. Total number of students within the major

There are between 40 and 50 students within the BEE Major.

III. Goals within the major - What are expectations of students post-graduation?

After graduating, students have the opportunity to directly enter the work force or continue their education by receiving a Masters or PhD. Following graduation, students can also begin working and studying for their Fundamentals of Engineering Exam to receive a Professional Engineering License. IV. Major Courses - What is the goal of each course? What should students be

learning?

The BEE Program involves rigorous biology, chemistry, engineering, math, and physics curricula. Through these STEM courses, students are expected to learn basic scientific knowledge and develop an understanding about how these subjects relate to BEE. Another goal of these courses is to teach students how to think critically and solve problems using the tools at their disposal. Students interested in pursuing a BEE major can expect to take numerous STEM courses all four years of their undergraduate career.

In addition to the core STEM requirements, there are several environmental courses that students are required to take. The goal of these classes is to give students the environmental context necessary to pursue careers in the environmental field.

View the BEE Handbook on the BEE Undergraduate Program website for a complete list of required courses and suggested course schedule. V. Concerns/Student issues with classes? How to resolve, suggestions?

Students may encounter scheduling issues because some classes are offered at the same time. One suggestion is to make frequent appointments with your major advisor (at least once a semester) to discuss the best course of action. Good planning, flexibility, and openmindedness are especially important when creating course schedules.

Talking to other students, especially upperclassmen, within the BEE major may also be helpful when facing issues. Other students who had encountered similar problems may be able to offer advice and valuable insight into what potential solutions are.

VI. Things going on within the major (Research, Visitors, Talks, Seminars within the

major)

Many professors within the BEE and related departments are actively performing research and happy to work with undergraduates. Finding out what each professor is working on and subsequently reaching out to the faculty member with a project of interest is a great way to get involved in undergraduate research and introduce yourself to professors in the department. Subscribing and reading the Cook Campus Weekly News is a great way to stay updated about events happening on campus.

VII. Research Opportunities

See above. There are several opportunities to participate in undergraduate research. Other events that help connect faculty and students are the Undergraduate Research Mixer and Science Cafes that are held periodically throughout the year.

VIII. Job Outlook, suggestions for students in this major (ex: organizations to join, news

to pay attention to)

With recent increases in awareness and concern about environmental issues, job outlooks are favorable. Attending events offered by the Office of Career Exploration and Success are a great way to speak to professionals in the field and learn more about what jobs are offered for BEE majors.

There are several environmental and engineering clubs/organizations including (but not limited to): Students for Environmental Awareness, Students for Environmental and Energy Development, RU Green Team, Engineers Without Borders, American Society of Agricultural and Biological Engineers, Solid Waste Association of North America, American Society of Civil Engineers, New Jersey Water Association, etc.

IX. Changes within the major in the upcoming year?

The BEE major (116 and 117) will change to the Environmental Engineering major (366). The new major will have a new curriculum that is jointly administered by the Civil and Environmental Engineering Department (SOE) and the Environmental Sciences Department (SEBS). Students already in the BEE program will be allowed to finish under the former BEE curriculum. The new program will also have a 4 + 1 year option for students to receive their Bachelors and Masters degree. Any current students will be given the opportunity to transfer if they so desire.

X. Other Suggestions

Be active in the community and enjoy your time at Rutgers! Explore and discover what your passions are and let them guide you to a path of success. Do not be afraid to ask for help or ask questions when you are unsure. Remember to balance your academic and social life and know that there are always resources available to you should you need them.