

Curriculum Senate Report – November 20, 2020

Prepared by Marci Carrasquillo on behalf of the Senate Curriculum Committee

The following major proposals from the **College of Business** are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5463207	Management and Entrepreneurship	New Degree-Related Program	<p>Concentration in Organizational Leadership</p> <p>https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5463207&chksum=7508e3bb97840e574d1863bcf2ac59d3c9e9a7adcd93b2147ad497ed580dffed</p> <p>Lead Sponsor: Joel Rudin</p>
<p>“Because the MBA is an advanced business degree, it prepares its graduates for business leadership positions. Many MBA programs allow their students to choose elective courses in leadership in order to strengthen their leadership skills and to demonstrate their leadership credentials. [S]ix other universities in New Jersey already provide this option to their students, therefore we also need to do so in order to compete for students who have this interest. [The proposed 9 s.h.] leadership concentration includes three leadership courses, which would position our MBA in a favorable competitive position as it would offer the option for students to pursue more leadership knowledge than competitor programs in NJ.”</p>			

Proposal #	Department	Process Type	Proposal
5463851	Marketing and Business Information Systems	New Degree-Related Program	<p>Concentration in Data Analytics</p> <p>https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5463851&chksum=2c3f9a22ca2ed7d2f1ba087952abce2735cf8fab1470c13a2e801d67fd9822ce</p> <p>Lead Sponsor: Jennifer Nicholson</p>
<p>The proposed 9 s.h. “Concentration in Data Analytics is designed for individuals who are currently in the Masters of Business Administration in the RCB and are looking to expand their knowledge and opportunities in the area of data analytics. There is an increased need for employees who can use programs, data, and computational tools to explore and discover relevant insights in big data as well as apply critical thinking skills to data analysis for purposes of improving organizational efficiency and solving business problems. Evidence of this demand can be found in the World Economic Forum’s (WEF) Future Jobs Report published in 2018 (http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf), which documented results from a survey of 313 global companies. In it, the WEF reported that 85% of companies will have adopted big data and analytics technologies by 2022. They also noted that 96% of companies were definitely planning or likely to plan to hire new permanent staff with relevant skills to fill future big data analytics related roles. As a result, the role of Data Analyst is forecast to be one of the most in-demand jobs by 2022. This demand is also evidenced by other sources, such as the US Bureau of Labor (https://www.bls.gov/ooh/math/operations-research-analysts.htm) and Robert Half (https://www.cio.com/article/3235944/hiring-the-most-in-demand-tech-jobs-for-2018.html). Furthermore, analytics has been identified as a core competency in the Rohrer College of Business, and this Concentration, along with a COGS, will move the RCB closer to fulfilling that competency.”</p>			

The following major proposals from the **College of Business** are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5463831	Marketing and Business Information Systems	New Degree-Related Program	<p>Certificate of Graduate Study in Data Analytics</p> <p>https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5463831&chksum=8b625a919008381526ca23cd8d8551309dea0e3a89aa33edf58a996f005e21a</p> <p>Lead Sponsor: Jennifer Nicholson</p>
<p>The proposed 9 s.h. “COGS in Data Analytics is designed for individuals who already have earned a Bachelor’s degree and are looking to expand their knowledge and opportunities in the area of data analytics. There is an increased need for employees who can use programs, data, and computational tools to explore and discover relevant insights in big data as well as apply critical thinking skills to data analysis for purposes of improving organizational efficiency and solving business problems. [...] While this COGS can be pursued independently as a standalone credential, it can also serve as a complementary offering to the MBA program. It is designed so that it can be utilized as a modular component for stacking with the MBA.”</p>			

Proposal #	Department	Process Type	Proposal
5463285	Marketing and Business Information Systems	New Degree-Related Program	<p>Minor in Business Analytics</p> <p>https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5463285&chksum=2a72466ec5a02de7a58e750f9f5c7e38a23459573d7bfde8d65a7a762f1d5ea</p> <p>Lead Sponsor: Jennifer Nicholson</p>
<p>“Today’s organizations are collecting and storing vast amounts of data, and there is an increased need for employees who can apply critical thinking skills to data analysis for purposes of implementing organizational strategies and even creating competitive advantage. Business Analytics encompasses the processes and techniques by which businesses transform raw data into meaningful information to gain new insights and improve strategic decision-making. Business analytics is a multi-disciplined field, and according to the International Institute of Business Analysis, business analysis skills are becoming foundational in a variety of career paths. The US Dept of Labor has projected a 14% increase in jobs related to Business Analysis between 2018 and 2028, which is 9% higher than the average growth rate for all occupations (https://www.bls.gov/ooh/business-and-financial/management-analysts.htm#tab-6). Furthermore, Business Analytics has been identified as a core competency in the Rohrer College of Business, and this minor will move the RCB closer to fulfilling that competency. The [proposed 18 s.h.] minor will be multi-disciplinary and will complement any of the RCB majors.”</p>			

The following major proposals from the **College of Engineering** are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5462013	Experiential Engineering Education	New Degree-Related Program	<p>Concentration: “Ph.D. in Engineering with Engineering Education Concentration” https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5462013&chksum=7ff962ed245ca97126a48e1fd6ed20e552f4d8285b7d6f3812f6bad7a625582d</p> <p>Lead Sponsor: Cheryl Bodnar</p>
<p>The proposed Concentration in Engineering Education “is unique from other existing [graduate] concentrations in the college due to its emphasis on the conduct of educational research within the context of engineering. As such, this concentration provides the foundational elements that doctoral students will need to engage with in order to properly situate their research work within the social sciences field and be able to ethically and reliably collect and analyze data that can impact engineering education practices in the future. [...] This is an 18 s.h. Concentration as it is important for the students to gain both breadth and depth in engineering education to prepare them for further research in this ever evolving and expanding field. Students are required to take four specific courses (12 s.h.) [...] that provide them breadth of knowledge. Then they also are obligated to take two additional courses (6 s.h.) of their choosing, that they pick from a separate electives course bank, which will build their depth of knowledge in engineering education.”</p>			

Proposal #	Department	Process Type	Proposal
5461611	Civil and Environmental Engineering	New Degree-Related Program	<p>Certificate of Undergraduate Study in Water Resources Engineering https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5461611&chksum=401aa9435770d13106f6218f1811d6880d5620f027c15b55d5fd1aa7c541a441</p> <p>Lead Sponsor: Jagadish Torlapati</p>
<p>The proposed 12 s.h. “Certificate of Undergraduate Study in Water Resources Engineering will allow students to increase the depth and breadth of knowledge in water resources engineering fundamentals. The coursework is designed for immediate transference to water resources engineering design application in the United States. This CUGS will be attractive to students who have fundamental knowledge in civil engineering, but desire additional skills and formal education in the field of water resources engineering [and] will provide students with the necessary tools required by the water resources design industry, which is heavily represented in our geographic area. We therefore expect that students who will complete this CUGS will be marketable and career-ready upon completion. All courses will be taught by highly qualified faculty with expertise in water resources engineering, environmental sciences, or planning and geography.”</p>			

The following major proposals from the **College of Engineering** are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5456924	Civil and Environmental Engineering	New Degree-Related Program	Certificate of Undergraduate Study in Transportation Engineering https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5456924&chksum=64839a4842f322198722dea765278210be971a3898d9ef56661086202e75ff2c Lead Sponsor: Will Riddell
<p>“The BS in Civil Engineering degree at Rowan University is designed to foster and graduate civil engineers who are exposed to all fields of civil engineering. This approach is in keeping with the philosophy of our accreditation board (ABET) and professional society (ASCE). However, this approach necessarily limits the extent to which students can specialize on specific fields of civil engineering in the context of a BS degree. Historically, civil engineers developed skills in specialized fields of civil engineering through a Masters degree. [...] The [proposed 12 s.h.] CUGS in Transportation Engineering will allow students to increase the depth and breadth of knowledge in transportation engineering fundamentals during their undergraduate studies. This will allow students to graduate from Rowan University better prepared for a career specifically in Transportation Engineering than they would with just the BS degree, and provide them with an additional credential beyond the BS, yet prior to earning a MS degree. The additional coursework and credential will make students more attractive to employers in Transportation Engineering. Completion of this CUGS will provide students with the necessary tools required by the transportation design industry, which is heavily represented in our geographic area and hires many of our students upon graduation, supporting the pillar of being an Economic Engine for the region.”</p>			

Proposal #	Department	Process Type	Proposal
5456287	Civil and Environmental Engineering	New Degree-Related Program	Certificate of Undergraduate Study in Environmental Engineering https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5456287&chksum=413d0467a4c88f1e1f7128c2ccf5cda759f03c5857572e0ca1fa6034ab93f017 Lead Sponsor: Will Riddell
<p>“The BS in Civil Engineering degree at Rowan University is designed to foster and graduate civil engineers who are exposed to all fields of civil engineering. This approach is in keeping with the philosophy of our accreditation board (ABET) and professional society (ASCE). However, this approach necessarily limits the extent to which students can specialize in specific fields of civil engineering in the context of a BS degree. Historically, civil engineers developed skills in specialized fields of civil engineering through a Masters degree or years of professional practice. The [proposed 12-14 s.h.] CUGS in Environmental Engineering will allow students to increase the depth and breadth of knowledge in environmental engineering fundamentals during their undergraduate studies. This will allow students to graduate from Rowan University better prepared for a career specifically in environmental engineering than they would with just the BS degree, and provide them with an additional credential beyond the BS, yet prior to earning a MS degree. The additional coursework and credential will make students more attractive to employers in Environmental Engineering. [...] Completion of this CUGS will provide students with the necessary tools required by the environmental engineering industry, which is heavily represented in our geographic area and hires many of our students upon graduation, supporting the pillar of being an Economic Engine for the region.”</p>			

The following major proposals from the **College of Engineering** are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5456146	Civil and Environmental Engineering	New Degree-Related Program	Certificate of Undergraduate Study in Geotechnical Engineering https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5456146&chksum=974d454f9373cf067ee6af93f908717702d913a1c1c569198f0f86161db03d14 Lead Sponsor: Will Riddell
<p>“The BS in Civil Engineering degree at Rowan University is designed to foster and graduate civil engineers who are exposed to all fields of civil engineering. This approach is in keeping with the philosophy of our accreditation board (ABET) and professional society (ASCE). However, this approach necessarily limits the extent to which students can specialize in specific fields of civil engineering in the context of a BS degree. Historically, civil engineers developed skills in specialized fields of civil engineering through a Masters degree or years of professional practice. The [proposed 12 s.h.] CUGS in Geotechnical Engineering will allow students to take courses specific to Geotechnical Engineering as well as courses that will establish a background in the related field of Geology. This will allow students to graduate from Rowan University better prepared for a career specifically in geotechnical engineering than they would with just the BS degree, and provide them with an additional credential beyond the BS, yet prior to earning a MS degree. The additional coursework and credential will make students more attractive to employers in geotechnical engineering. [...] Completion of this CUGS will provide students with the necessary tools required by the geotechnical engineering industry, which is heavily represented in our geographic area and hires many of our students upon graduation, supporting the pillar of being an Economic Engine for the region.”</p>			

The following major proposals from the **College of Science and Mathematics** are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5467622	Computer Science	Quasi-Curricular	Change the Name of an Existing Certificate of Graduate Study: from “COGS in Computational Data Analytics” to “COGS in Computational Data Science” https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5467622&chksum=a8945b1f23932f3d36e3fcb9bdc11b0477814e315bdaeb1b1278d8d23901879c Lead Sponsors: Anthony Breitzman and Jack Myers
<p>In AY 2019-2020 the Department of Computer Science “renamed the minor, the MS degree, and the concentration from Data Analytics to Data Science. [...] This proposal brings the COGS in line with our other programs.” When all of these programs were created, including the COGS, “the difference between ‘Data Analytics’ and ‘Data Science’ was not clearly defined. Now that the two fields have evolved, it is apparent that [they are] actually ‘Data Science’ and not ‘Data Analytics.’ We need to change the name of [the COGS] to ensure that we accurately reflect the content.”</p>			

The following major proposals from the College of Science and Mathematics are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5471562	Computer Science	Quasi-Curricular	Retire the Certificate of Graduate Study (COGS) in Web Development https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5471562&chksum=f892c172873622ddc95929760d831a44662095d390f9872038f9ea09eb545dff Lead Sponsors: Anthony Breitzman and Jack Myers
<p>“The Web Development COGS has been extremely under-enrolled. The COGS consists of the only graduate Web Development course that we offer, along with three tangential courses. The only 3 students who have declared this COGS in the last four years were students who enrolled in the Masters Degree, and added this COGS the semester of their graduation because they happened to have taken the four courses in the COGS. Since we feel this COGS no longer adheres to our departmental mission, nor is it a marketable offering for the university, we would like to retire it.”</p>			

The following major proposals from the School of Health Professions are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5476823	Health and Exercise Science	New Degree	BA in Fitness Management https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5476823&chksum=7c6dd5030e7f5c5fe75ff89ce3e1c5505c64988adb9434e14fd0e0e7bb282d8c Lead Sponsor: Greg Biren
<p>The proposed “BA in Fitness Management creates a pathway for students to receive an undergraduate degree with three of the four years at the community college [Rowan College of South Jersey] making it more easily accessible than traditional four-year programs. It also provides a well-defined and specific route to fitness related professions for students interested in those areas. This degree proposal supports Rowan's strategic pillar of Accessibility by creating a pathway for students to receive an undergraduate degree with three of the four years at the community college making it more easily accessible than traditional four-year programs. It also provides a well-defined and specific route to fitness related professions for students interested in those areas. [...] The US Bureau of Labor Statistics ‘projects employment for most occupations in the fitness industry to grow at least 15%, much faster than the average for all occupations in all industries, through 2029. Fitness trainers and aerobic instructors are projected to add the most jobs in these centers: about 31,000 over the 2018-2028 decade. This occupation also had the most employment in the industry in 2018, accounting for nearly 1 in 3 jobs.’ Students graduating from this program will find employment in commercial fitness centers, strength and conditioning programs, community based programs such as the YMCA, cross fit gymnasiums. They can work as fitness instructors, personal trainers, yoga/pilates instructors and managers of these programs. Some students may pursue opening of their own fitness facilities.”</p>			

The following major proposals from the **School of Health Professions** are being submitted for Senate Approval:

Proposal #	Department	Process Type	Proposal
5468903	Health and Exercise Science	Quasi-Curricular	<p>Change the Name of an Existing Degree: from “BS in Nutrition and Exercise Science” to “BS in Nutrition”</p> <p>https://onbase.rowan.edu/AppNetForms/docpop/docpop.aspx?docid=5468903&chksum=8578163775fe2d3b241a3d07689168433cd9d9a2033cd34c808d672c6fd47f59</p> <p>Lead Sponsor: Elizabeth Tenison</p>
<p>“The [proposed] name of the degree, BS in Nutrition, accurately reflects the degree content (nutrition focused courses) rather than the current name of the degree, BS in Nutrition and Exercise Science. Also, the HES department has a degree, BS in Exercise Science. The two degree names (BS in Exercise Science & BS in Nutrition and Exercise Science) represent two different degree pathways. However, the degree names imply that the curriculum is similar. The new degree name, BS in Nutrition, will clarify the nutrition content of the degree for prospective students. The BS in Nutrition will include more biochemistry, organic chemistry as well as Community Nutrition, Contemporary Issue in Nutrition and free electives; the classes are more science based with a nutrition concentration in place of the Exercise Science courses. The BS in Nutrition will allow the Nutrition Program to expand its student numbers to include prospective students interested in a BS in Nutrition as a pathway to a health profession degree. The BS in Nutrition may lead to students pursuing degrees in medicine, physician assistant, nursing and other health related degrees.”</p>			