## Undergraduate Academic Affairs Committee Minutes – February 4<sup>th</sup>, 2021 Outcome of UAAC Sub-Meeting – February 11<sup>th</sup>, 2021

<u>Call to Order</u>: R. Wood called the meeting to order at 9:00am via Zoom.

### <u>Business</u>

#### Presented by Gary Barker - New Major: B.S. in Geoinformatics Geospatial Analytics

This program is designed for both traditional and non-traditional students. A portion of the major course work is dually listed so that students may take GIS courses in the evening (if they choose) and with recent trends toward virtual education the GIS program is well-positioned to allow non-traditional students to succeed. To supplement the targeting of traditional/non-traditional students, we are also targeting regionally. Currently, within three hours of the city of St. Louis there are zero opportunities for people to attain a B.S. degree in GIS, which drives students elsewhere to seek such degrees. Programs in Geoinformatics and Geospatial Analytics are even more rare in the region. Additionally, the curriculum would facilitate collaboration between students across colleges on campus. Three 2+SLU Programs are waiting for the approval of this program so that we may begin developing pipelines to offer paths to education and employment that weren't offered before for the geospatial industry in St Louis. Capstone requirements would increase undergraduate participation in research projects and facilitate further research in the St Louis community and Geospatial Institute.

Students must have a minimum of a 2.00 GPA in their Geoinformatics and Geospatial Analytics major courses and required related credits (GIS, mathematics, statistics, and computer sciences) by the conclusion of their freshman year. Students that fall below a 2.00 GPA after their freshman year will be placed on probation. Students placed on probation have a maximum of one year to raise their GPA to at least a 2.0. After their freshman year, students must maintain a GPA of 2.0 to remain in good standing in the program. Students may not graduate while they are on probation. Students who do not fulfill probationary requirements will be dropped from the program.

• Committee discussed learning outcomes and assessment plan. The committee requested a revised proposal of the learning outcome and assessment plan. When revised, it will then be sent to UAAC Sub-Committee for discussion and or approval.

New revised proposal sent to UAAC Sub-Committee and it was unanimously approved by UAAC-Sub Committee on February 11<sup>th</sup>, 2021. Approved Program Attached



#### Presented by Gary Barker - New ABM: POLS Minor to POLS M.A

This program allows a student to complete, in accelerated fashion, both a minor in Political Science and the Master of Arts in Political Science and Public Affairs. Students in the accelerated minor to MA may count 6 credit hours toward both the POL Minor and the POLS M.A.

An accelerated pathway from the Political Science BA to the Political Science and Public Affairs MA already exists. We wish to add a pathway from the Political Science minor to the MA to grow our successful but small MA program. For more than a decade, about half of our highest achieving MA students have come through our own ABM program. We anticipate similar academic strength among advanced students who come to the political science minor later in their college career. Our effort to attract these students to the MA follows the example of Computer Science, which has recently established an accelerated path to the master's degree for CS minors.



#### Presented by Mark McQuilling - Curriculum Changes – Aerospace Engineering Program

The changes in the AE curriculum are driven largely by evolving ABET expectations and the new Core. Three courses (9 credit hours, Heat Transfer, Computer Aided Engineering, Math/Science elective) are replaced by three courses (Material Science, Design of Space Missions, Technical Elective). Two one-credit first year courses (Introduction to Aerospace Engineering and Computer Aided Design) are being combined into a new pair of classes that will also address Core requirements (Fundamentals of Engineering/Studio, 3 credits total). Two one-credit labs are combined into a single one-credit lab and one lecture-based 3 credit course (Introduction to Aeronautics and Astronautics) is becoming a 1 credit project-based course. Three other courses (Gas Dynamics/Compressible Flow, Aerodynamics/Aerodynamics and Boundary Layer Flow, Machine Shop/Prototyping; 7 credits total) are being modified. The change in overall credit hours is a reduction from 127 to 125.

• The Committee unanimously approved the curriculum updates for Aerospace Engineering Program

Approved unanimously by UAAC-Sub Committee on February 11<sup>th</sup>, 2021. Approved Program Changes Below



## Presented by Mark McQuilling - Mechanical Engineering Programs

These changes modernize the ME curriculum while allowing for Common Core implementation when ready. Total credit hours for the degree decrease from 124 to 121, moving in line with national trends. There are four new courses: Engineering Fundamentals (2cr) and Studio (1cr) replace the 2 credits of introduction in the previous program and support the Core; Design Thinking (3cr) helps orient students' perspectives to the way engineers approach design; and Mechanics Lab (1cr) combines aspects of the previous Fluid Dynamics Lab (1cr) and Mechanics of Solids Lab (1cr) into a single cohesive lab experience. Four courses are updated: Machine Shop (1cr) is renamed to Prototyping (1cr) as it includes laser cutting and aligns better to modern engineering description; Measurements (3cr) is renamed to Engineering Experimentation (3cr) and will include modern design of experiments techniques; Applied Thermodynamics (3cr) is renamed to Thermal Systems Design (3cr) to focus more on designing new thermal systems which also addresses an ABET accreditation concern; and Mechanical Systems Design (3cr) is updated to reflect a single semester design course. These changes represent 8 out of 44 courses for the ME degree, or 18%.

 The Committee unanimously approved the curriculum updates for Mechanical Engineering Programs Approved unanimously by UAAC-Sub Committee on February 11<sup>th</sup>, 2021. Approved Program Changes Below

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#### Presented by Jay Haugen - Leave of Absence Policy

Jay Haugen proposed to add a paragraph to the Leave of Absence policy that is already in place. He proposed to add the following criteria:

No more than six-pre-approved credits while on an approved leave of absence or suspension.

• The committee unanimously approved this addition to the LOA policy.

# **Approval of Meeting Minutes**

• No January 2021 UAAC Meeting

#### **Announcement and Adjournment**

Next UAAC Meeting: Thursday, March 4<sup>th</sup>, 2021 from 9:00 am- 10:30 am via ZOOM. The meeting link will be sent out closer to time.

The meeting was adjourned by Robert Wood @ 10AM