Submitted by: Keith E. Whitfield, Provost and Senior Vice President for Academic Affairs

ESTABLISHMENT OF A NEW PROGRAM FOR THE BACHELOR OF SCIENCE IN WELDING AND METALLURGICAL ENGINEERING TECHNOLOGY

Recommendation

It is recommended that the Board of Governors establish a new degree program, the Bachelor of Science in Welding and Metallurgical Engineering Technology (BS WMET), in the College of Engineering effective Fall 2020.

Background

The demand for Welding and Metallurgical Engineering Technology graduates at the Bachelor of Science level is growing and the Division of Engineering Technology (ET) would like to offer a BS in Welding and Metallurgical Engineering Technology (BS WMET) degree. This program will be an upper two-year program. All Engineering Technology programs are upper two-year programs in Engineering Technology at Wayne State University. Surrounding community colleges will be the feeder schools into this 4-year program.

Program Description

Metallurgy and Welding are two technologies that both have their roots in the Industrial Revolution, where the joining of metals began with the forge welding of pig or wrought iron. Because of their fundamental nature, these technologies are intertwined. The ability to develop and join metals has made immeasurable contribution to the transportation, aerospace, agricultural and defense industries.

The BS WMET program will bring together the theoretical and practical aspects of welding and metallurgy to provide industry with graduates proficient in both areas. Since this is an upper 2-year program, students are expected to complete their lower 2-yr welding or similarly named programs at one of the surrounding community colleges then transfer to WSU to complete a 4-yr BS WMET degree.

Admissions Requirements

The BS WMET degree program is designed to admit students who satisfy the general undergraduate admission requirements of the University and have an associate degree or equivalent course work in a preparatory program such as welding technology or closely related disciplines. A minimum grade point average (GPA) of 2.5 is required for admission into the program. Students with a GPA of 2.0 to 2.5 may be admitted as Pre-Engineering Technology students, and may be transferred into the BS WMET program upon successful completion of pre-calculus (MAT 1800) and physical science courses, with a GPA of 2.5 or above. A Mathematics Placement Examination is required of entering students who have not already earned advanced credit in pre-calculus.

Curriculum Requirements

BS WMET degree requires a minimum of 121 credits including the University General Education Requirements.

Graduation Requirements

Candidates for the BS WMET degree must earn a minimum of 121 credits including all program and University General Education Requirements and attain a minimum 2.0 GPA.

Program Administration

Administration of the BS degree will be integrated with the current Division administration of its existing engineering technology degree programs. A special advisory council of ET faculty along with faculty with metallurgical background from Mechanical Engineering and Chemical Engineering will meet on a more frequent basis to perform more detailed reviews of the program and report their findings to the department faculty.

Budget and Resource Requirements

Most of the courses are based on the existing classes offered within the Engineering Technology and Mechanical Engineering units. There are 8 new courses to be developed, some requiring laboratory. We have the necessary space for these laboratories along with some equipment. We are working with industry partners and alumni to acquire the rest of the equipment. Also, some of our community college partners are interested in us offering some of these courses on their campuses.

Approvals

The proposal was approved by the faculty of the Division of Engineering Technology, the Academic Operations Committee of the College of Engineering, the Dean of the College of Engineering, and the Provost.

Submitted by: Keith E. Whitfield, Provost and Senior Vice President for Academic Affairs

ESTABLISHMENT OF A NEW PROGRAM FOR THE BACHELOR OF GENERAL STUDIES

Recommendation

It is recommended that the Board of Governors establish a new degree program, the Bachelor of General Studies in the College of Liberal Arts and Sciences, effective Fall 2019.

Program Description

CLAS, with the support of Provost's Office, seeks to establish a Bachelor of General Studies. As proposed, the Bachelor of General Studies is a general undergraduate degree pathway without a traditional academic major. General Studies graduation pathways (sometimes titled "Applied Studies" or "Individualized Studies") are offered by many institutions. Some colleges and universities specifically gear these degree pathways towards students who may not otherwise finish their college degrees, and for whom a Bachelor of General Studies may truly be the only option for completion. Other colleges/universities offer these degree pathways with transfer students in mind, or fully online for accessibility purposes. Both high-ranking institutions with narrow admissions standards and open access institutions (such as community colleges) offer options similar to the degree program that CLAS is proposing. In all cases, other universities and colleges define these programs as pathways that allow students to individually structure their degree requirements without requiring a specific major. Other institutions make it clear that a Bachelor of General Studies is ideal for degree-seekers with one or more of the following characteristics:

- Students with college credits from multiple institutions
- Students who have completed a variety of courses towards a specific major, but are no longer pursuing that path
- Students interested primarily in earning a Bachelor's degree, without a requirement for, or interest in, a specific major
- Students who are interested in career fields that do not require a specific academic major or certification
- Transfer students who enter without a major, especially non-traditional students who have completed all general education courses as well as associate degrees
- Students who began as pre-majors in a particular area but have been unable to gain admission to their desired degree program
- Students who are already gainfully employed and simply need a Bachelor's degree for career advancement
- Students unable to finish another major because of changing life circumstances but who want to earn a bachelor's degree to complete their undergraduate experience

While some institutions require that students elect a thematic area within their General Studies degree pathway, and complete a set number of credits within that thematic area, not all institutions deem this necessary. Some institutions purposely keep General Studies requirements to a minimum in order to allow students to maximize already-completed credits, thinking about this degree pathway for local professionals who need a Bachelor's degree but do not need expertise in a specific major. Therefore, students who have come close to completing another

degree but, for a variety of reasons, have not been able to complete that degree, could be directed to the General Studies degree program. Students may increase their focus and expertise by completing an official minor along with the General Studies degree, but selecting a minor is not required of students in this degree pathway.

Admission Requirements

Because CLAS would like to insure that students have explored other specialized degree programs first before choosing this degree program, there will be a secondary admissions process by which students' eligibility will be determined. Students can apply for entry into this degree program after meeting certain minimum criteria. Specifically, eligible students will already have earned:

- Upper-division standing, with at least six college-level semesters (three academic years)
- a cumulative GPA of 2.0 or higher
- at least three college-level semesters at Wayne State
- a minimum of 30 credits at Wayne State
- a combination of both beginning level (1000- and 2000-level) and intermediate level (3000- or above) coursework at Wayne State
- at least 15 credits in intermediate level (3000- or above) coursework, with a 2.0 cumulative GPA or higher
- at least 20 credits within a CLAS-based major (either a current or discontinued major)

Students will be eligible to graduate from this degree pathway upon meeting all above criteria as well as completing all General Education requirements and College-level requirements and maintaining a cumulative GPA of 2.0 or higher, as defined by the University's undergraduate bulletin.

Secondary Admissions Process:

The CLAS Dean's Office will appoint a standing committee that will review and evaluate student applicants and grant admission to students who are eligible. Tenure-track/tenured faculty and academic advisors in CLAS will be represented on this committee, as will advisors in the University Advising Center, to ensure that all groups who have contact with students have input about which students should be admitted. Admissions decisions about student eligibility will be made on a rolling basis. Upon admission, General Studies students will be monitored and advised by an advisor appointed by the CLAS Dean's Office, in conjunction with the committee, to insure progress towards graduation. General Studies students' progress will be evaluated on a semester-by-semester basis.

Program Administration

The CLAS Dean's Office will be responsible for implementing and monitoring the General Studies degree program, with the help of the representative committee described above. The Dean and a designated Associate Dean in CLAS will appoint the standing committee to select and evaluate students for this degree program, and will select an academic advisor who will direct students' progress while on the path to graduation.

Budget and Resource Requirements

This program will be supported through the College of Liberal Arts and Sciences. The CLAS Dean's Office will reallocate advising resources to General Studies as needed.

Approvals

The proposal was approved by the College of Liberal Arts and Sciences' Faculty Council and Faculty Assembly, the Dean of the College of Liberal Arts and Sciences, and the Provost.