

**University of Minnesota Board of Regents**  
**Mission Fulfillment Committee**  
**May 12, 2022**  
**Public Review Consent Report: Academic Program Changes**

**I. Request for Approval of New Academic Programs**

**College of Science and Engineering (Twin Cities Campus)—Create a M.S. in Data Science for Chemical Engineering and Materials Science**

The College of Science and Engineering on the Twin Cities campus requests approval to create a Master of Science degree in Data Science for Chemical Engineering and Materials Science, effective fall 2022. The proposed program bridges disciplinary expertise in chemical engineering and materials science with data and computational science. The program core provides fundamental knowledge of statistical and data analysis, machine learning, and artificial intelligence, as well as their application in chemical, biological, and materials science and engineering problems. Elective courses allow students to specialize in artificial intelligence, high performance computing, systems engineering, automation and robotics, or data analytics, depending on their specific interests and needs. The proposed degree program responds to the pressing need of the chemical, biotechnology, and materials industry for chemical engineers and materials scientists who combine disciplinary expertise with data science expertise. It is a coursework-based M.S. degree program (with the option of a capstone project) that emphasizes statistics, computing, data analysis, and optimization, and their application in chemical engineering and materials science. The program has been developed and will be offered in coordination with the Department of Computer Science and Engineering and the School of Statistics. It will therefore have a strong interdisciplinary character and is unique within UMN. No such interdisciplinary program exists currently in peer U.S. institutions. The proposed program will be mostly classroom-based (face-to-face) and makes use of existing resources.

**Medical School (Twin Cities Campus)—Create a Fellowship in Advanced Imaging: Musculoskeletal and Emergence Radiation**

The Medical School on the Twin Cities campus requests approval to create a Fellowship in Advanced Imaging: Musculoskeletal and Emergence Radiation, effective summer 2022. The proposed fellowship will be a one-year, non-accredited program with one fellow. Emergency Radiology is an emerging subspecialty. The combination of the case mix and faculty expertise provide an outstanding opportunity for a fellowship candidate excited to enter this field. The program would benefit the University by attracting radiology residency and fellow applicants, and will help to expand a needed Emergency Radiology workforce. The trainee will acquire a unique combination of knowledge in the fields of musculoskeletal and emergency radiology as well as acquire effective communication skills as part of an interdisciplinary care team. The program is funded by the Department of Health and Human Services and the University Radiology Department (50/50).

**College of Continuing and Professional Studies (Twin Cities Campus)—Create a Post-Baccalaureate Certificate in Transgender & Gender Diverse Health**

The College of Continuing and Professional Studies on the Twin Cities campus requests approval to create a Post-Baccalaureate Certificate in Transgender and Gender Diverse Health, effective spring 2023. The proposed 12-credit graduate-level online certificate will be offered in collaboration with the Institute for Sexual and Gender Health (ISGH) and the National Center for Gender Spectrum Health (NCGSH). Students may complete this certificate as a standalone credential, as elective coursework for their graduate degree housed outside of CCAPS, or as a second 12-credit certificate in the 30-credit Master of Professional Studies in Sexual Health (MPSSH) degree. The target audience for this Certificate is prospective students looking for a professionally focused graduate credential to complement their current or future positions in healthcare or patient advocacy. Currently-admitted students in the MPS in Sexual Health and University of Minnesota graduate students in related fields such as nursing, social work, family science, psychology, and those pursuing professional degrees in medicine, pharmacy, or dentistry may also pursue the certificate as an additional credential as they complete their degree.

### **School of Nursing (Twin Cities Campus)—Create a Pediatric Nurse Practitioner - Acute Care Post-Graduate Certificate**

The School of Nursing on the Twin Cities campus requests approval to create a Pediatric Nurse Practitioner - Acute Care Post-Graduate Certificate (PNP-AC), effective fall 2022. The proposed program offers students with a Doctor of Nursing Practice (DNP) degree in a clinical nursing specialty area the opportunity to complete an additional area of study. Nurse practitioners complete advanced nursing degree programs with a specialty focus. After completing the degree and specialty focus, the individual takes a national certification examination in that specialty and then is eligible to hold licensure as an advanced practice registered nurse in that specialty. This certificate is one of eight specialty post-graduate certificates offered by the School of Nursing. There are no pediatric nurse practitioner-acute care programs in the state of Minnesota. Nurses living and working in Minnesota who desire to function as PNP-ACs attend out of state programs (e.g. University of Iowa; University of Michigan). The three children's hospitals in the Twin Cities area have repeatedly requested the School of Nursing offer a program to prepare nurses as PNP-AC. The PNP-AC academic plan will build on the academic plans for nurse practitioner specialties already offered by the School of Nursing (e.g. Pediatric Primary Care Nurse Practitioner; Family Nurse Practitioner) and makes use of existing resources.

### **School of Nursing (Twin Cities Campus)—Create a Post-Baccalaureate Certificate in Population Health Informatics & Technology**

The School of Nursing on the Twin Cities campus requests approval to create a Post-Baccalaureate Certificate in Population Health Informatics & Technology (PHIT), effective fall 2022. The proposed Certificate prepares trainees to harness the power of data for improving public and population health. Students will learn about various information systems in public health, electronic data exchanges, and tools for consumer engagement, along with the utility of data for health equity and better population health. The certificate courses are offered in a fully online format and include a practicum that provides experience in public health and non-profit care settings. The PHIT Certificate is funded in part by a grant from the Office of the National Coordinator for Health Information Technology for Public Health IT Workforce Development. The University of Minnesota is a leader in nursing informatics and was the first school to offer a Doctor of Nursing Practice specialty in nursing informatics in the country, and is home to the Center for Nursing Informatics. The Institute for Health Informatics (IHI) at the University educates students and conducts research in biomedical and health informatics and offers academic training leading

to MHI, MS, and PhD degrees in health informatics. The Public Health Data Science M.P.H. program offered at the School of Public Health offers specialized training in computational and statistical methods. The PHIT Certificate will complement the existing training programs and offer greater specialization for students interested in public/population health informatics.

### **College of Liberal Arts (Twin Cities Campus)—Create an Undergraduate Minor in Dance**

The College of Liberal Arts on the Twin Cities campus requests approval to create an Undergraduate Minor in Dance, effective fall 2022. The Dance Minor in the Theater Arts and Dance Department invites students to investigate movement as a simultaneously physical, creative, and intellectual study of dance in global contexts. The minor allows students to support their other academic studies by integrating physical learning, creativity, and research into their educational career. After students take foundational requirements, they can design their own pathway through the Dance Program's four interconnected pillars: Technique/Practice; Dance-Making/Composition; Dance Studies/Theory and History; and Performance and Design. Pre-designed pathways are also available options for students. This minor integrates the Dance Program's values of movement as meaning-making, thoughtful creativity, and social justice practice. The proposed minor is majority face-to-face courses and makes use of existing resources.

### **Crookston Campus—Create a Health Service Executive B.S.**

The Crookston campus requests approval to create a Health Service Executive (HSE) Bachelor of Science degree, effective fall 2022. The proposed program provides another option for students interested in pursuing career opportunities to manage and lead organizations within the long-term care industry, including nursing homes, residential care, assisted living, and home- and community-based services. Graduates will gain knowledge and skills required to obtain licensing as a Health Services Executive, which many states have recognized as the standard for long-term care administrators. The program has been approved by the Minnesota Board of Executives for Long Term Services and Supports, allowing graduates to be eligible to become licensed as a Health Services Executive. The fully online program provides a broad academic foundation in long-term care services and is supported by faculty and community partners to prepare students for career success, graduate study, and engaged citizenship. The most appealing aspect is that this will be the only fully online program in the country. In addition, labeling this as an HSE degree will improve industry recognition of our graduates' knowledge and skills.

### **Crookston Campus—Create an Undergraduate Minor and Certificate in Turfgrass Management**

The Crookston campus requests approval to create an Undergraduate Minor and Certificate in Turfgrass Management, effective fall 2022. The turfgrass management program allows undergraduate students in Agronomy, Horticulture, Natural Resources, Biology, Environmental Sciences, and Sport Recreation Management to gain the knowledge and expertise required to maintain and manage high-quality turfgrass from various turf areas such as lawns, parks, sod farms, sports fields, and golf courses. Turfgrass managers use theory, practice, experimentation, and technology acquired through courses to apply their expertise in maintaining and managing various turfgrass areas while balancing the needs of nature. Currently, there are not enough students or graduates to fill all of the employment opportunities in the turfgrass industry, especially in the area of golf course management. U of M Crookston would be the only program in Minnesota to offer a certificate in turfgrass management. Jobs within the turfgrass industry would be more accessible to students from related and non-related majors/fields by giving them an

opportunity to earn a certificate in turfgrass management. The proposed program makes use of existing courses and resources in the Turf major.

### **Crookston Campus—Create an Undergraduate Minor in Soils**

The Crookston campus requests approval to create an Undergraduate Minor in Soils, effective fall 2022. The proposed minor in soils will provide students within related fields of study such as Agronomy, Horticulture, Natural Resources, Turfgrass Management, Biology, and Environmental Science with a foundation in the physical, chemical, and biological soil properties and processes essential to such a complex ecosystem. Soil plays a vital role in sustaining human welfare and assuring future agricultural productivity and environmental stability. Soil scientists explore, discover, and seek to understand the earth's land and water resources in an effort to be more sustainable to our environment. Students obtaining a minor in soil science learn to identify, interpret, and manage soils for agriculture, forestry, rangeland, ecosystems, urban uses, and mining and reclamation in an environmentally responsible way that benefits nature. Adding a soils minor will enable our students to be more competitive for employment within the agricultural industry. A majority of the courses in the program take place in the classroom format (face-to-face) and make use of existing resources.

### **Crookston Campus—Create an Undergraduate Minor in Precision Agriculture**

The Crookston campus requests approval to create an Undergraduate Minor in Precision Agriculture, effective fall 2022. Precision agriculture is the use of technology to practice information-intensive agronomy. Precision agriculture is an area of interest for current and prospective students, and builds UMC's existing strengths in agronomy, soils, and natural resources. Agronomists will encounter precision mapping, be expected to use precision agriculture computer applications, and be called upon to use precision agriculture outputs while advising crop management decisions. UMC's Agronomy program has a strong regional presence, and building the technological capability for precision agriculture work is aligned with UMN Crookston's mission to combine theory, practice, and experimentation in a technologically rich environment. A minor makes use of existing courses and provides students with a formalized package of courses, rather than taking them each as electives.

## **II. Request for Approval of Changed Academic Programs**

### **Name Change Requests:**

#### **College of Liberal Arts (Twin Cities Campus) — Change the name of graduate minor in Race, Indigeneity, Gender, and Sexuality.**

The College of Liberal Arts requests approval to change the name of the graduate minor in Race, Indigeneity, Gender, and Sexuality (RIGS) to Race, Indigeneity, Disability, Gender, and Sexuality (RIDGS), effective fall 2022. The proposed name change reflects current curricular alignment.

#### **College of Liberal Arts (Twin Cities Campus) — Change the name of the graduate minor in Classical and Near Eastern Studies.**

The College of Liberal Arts requests approval to change the name of the graduate minor in Classical and Near Eastern Studies to Classical and Near Eastern Religions and Cultures, effective fall 2022. The proposed name change reflects current curricular alignment.

**College of Liberal Arts (Twin Cities Campus) — Change the name of Bachelor of Arts in Mass Communication.**

The College of Liberal Arts requests approval to change the name of B.A. in Mass Communication to Media and Information, effective fall 2022. The proposed name change reflects current curricular alignment.

**College of Arts, Humanities, and Social Sciences (Duluth Campus) — Change the name of the Environment and Sustainability subplan in the Bachelor of Arts in Environmental, Sustainability, and Geography.**

The College of Arts, Humanities, and Social Sciences on the Duluth Campus requests approval to change the name of the Environment and Sustainability subplan to the General subplan in the Bachelor of Arts in Environmental, Sustainability, and Geography, effective fall 2022.

**Crookston Campus—change the name of the Bachelor of Science in Golf and Turf Management.**

The Crookston Campus requests approval to change the name B.S. in Golf and Turf Management to Golf and Sports Turf Management, effective fall 2022. The proposed name change was recommended through a program review process.

**Crookston Campus—change the name of the Nursing Home Administrator Certificate.**

The Crookston Campus requests approval to change the name of the Nursing Home Administrator Certificate to the Health Services Executive Certificate, effective summer 2022. The proposed name change reflects current curricular alignment.

**Subplan Change Requests:**

**Carlson School of Management (Twin Cities Campus)—Discontinue the Industry subplan in the M.B.A. degree.**

The Carlson School of Management on the Twin Cities Campus requests approval to discontinue the Industry subplan in the Master of Business Administration degree, effective fall 2022. Program was discontinued due to low enrollment and due to the creation of the Online MBA Program sub-plan. It was a one-year cohort program and all graduates have completed the program or have been discontinued.

**Carlson School of Management (Twin Cities Campus)—Create a Research Track subplan in the M.S. Finance degree.**

The Carlson School of Management on the Twin Cities Campus requests approval to create a Research Track subplan in the Master of Science in Finance degree, effective fall 2022. The proposed subplan is designed to meet student demand for a research-oriented Master of Science in Finance degree. The track is a one-year, 39-credit program that will provide students with basic research skills that can prepare them for research-oriented jobs or admission to a Ph.D. program in Finance.

**College of Continuing and Professional Studies (Twin Cities Campus)—Create two new subplans in the Master of Professional Studies degree in Sexual Health**

The College of Continuing and Professional Studies on the Twin Cities Campus requests approval to create a Transgender & Gender Diverse Health, and Self-Designed subplan options in the Master of Professional Studies (M.P.S.) degree in Sexual Health, effective spring 2023. The Transgender & Gender Diverse Health subplan includes the same coursework for the similiary-named Post-Baccalaureate Certificate detailed in the new program requests section of this report. The Self-Designed subplan allows students to select a combination of courses from the Sexual Therapy Post-Baccalaureate Certificate and the proposed Transgender and Gender Diverse Health Post-Baccalaureate Certificate to complete the program.

**College of Continuing and Professional Studies (Twin Cities Campus)—Create a Poultry Science Subplan in the Applied Sciences Leadership M.P.S.**

The College of Continuing and Professional Studies on the Twin Cities Campus requests approval to create a Poultry Science Subplan in the Master of Professional Studies, Applied Sciences Leadership degree, effective fall 2022. This subplan is for professionals interested in advanced understanding of poultry health and disease, with coursework focused on basic understanding of the avian host as it relates to poultry production systems, the technologies and tools to assess health, and diagnosing and addressing disease at the gross and molecular levels. The enhanced knowledge and hands-on experience with applied and/or molecular tools will position graduates to deal with commonly encountered and investigated issues that arise in poultry production and allied industries. The subplan makes use of existing courses in the Poultry Science Post-Baccalaureate Certificate.

**College of Design (Twin Cities Campus)—Discontinue subplan options in the Product Design B.S.**

The College of Design on the Twin Cities Campus requests approval to discontinue its subplan options in the Bachelor of Science in Product Design degree, effective fall 2022. The program is making a curricular structural change from subplan tracks to theme options - which are elective groupings, in order to provide flexibility and common degree for all students. Course offerings will remain the same so transition is minimal.

**College of Food, Agriculture, and Natural Resource Sciences (Twin Cities Campus)—Create a Tribal Natural Resources subplan in the Natural Resource Science and Management Ph.D. and M.S. degrees.**

The College of Food, Agriculture, and Natural Resource Sciences on the Twin Cities Campus requests approval to create a Tribal Natural Resources subplan in the Natural Resources Science and Management Doctoral and Master of Science degrees, effective fall 2022. Coursework and research in this subplan focuses on all aspects of natural resources (i.e., hydrology/water, soils, grasslands, forests, agriculture, etc.) as they pertain to Indigenous peoples, tribal natural resources management, and traditional ecological knowledge. Students will have the option to pursue lines of inquiry spanning the biological, physical, ecological, social, managerial, and engineering sciences. Students will be prepared for careers as researchers and managers of tribal lands and working with tribes and organizations that are aligned closely with tribal natural resource management.

**College of Human Service Professions (Duluth Campus)—Create a Plan C subplan option in the Environmental Education M.E.Ed.**

The College of Human Service Professions on the Duluth Campus requests approval to create a Plan C (coursework only) subplan option in the Environmental Education M.E.Ed. degree, effective fall 2022. Two program plans (B and C) will be available to students in this program.

**Crookston Campus—Discontinue subplan options in the Agronomy B.S.**

The Crookston Campus requests approval to discontinue subplan options in the Bachelor of Science in Agronomy degree, effective fall 2022. The program has been restructured by eliminating the subplans and adding a choice of set electives to the core requirements. This will allow students the flexibility of choosing courses that will meet their career needs without being confined to predefined sub-plans, which reflects changes in the field.

**Crookston Campus—Create an online subplan option in the Software Engineering B.S.**

The Crookston Campus requests approval to create an online subplan option in the Bachelor of Science in Software Engineering degree, effective fall 2022. Curriculum requirements are the same as the on-campus program. Online programs offer flexibility for students to complete the degree.

**Program Modality/Delivery Change Requests:**

The following graduate and graduate professional academic programs request approval to add or change program delivery options to provide some level of online delivery of courses within the program, effective fall 2022. Partially (50-80 percent), primarily (at least 80 percent), or completely online degree programs offer additional options for students to complete their degree programs.

**The College of Education and Human Development (Twin Cities Campus)**—Change program delivery modality in the Special Education Initial License M.Ed., Special Education M.Ed., and Special Education Graduate Minor degree programs from majority classroom to partially online.

**The College of Liberal Arts (Twin Cities Campus)**—Change program delivery modality in the Master of Arts (M.A.) in Strategic Communication degree program from majority classroom to completely online.

**The Carlson School of Management (Twin Cities Campus)**—Change program delivery modality in the Master of Business Taxation (M.B.T.) and corresponding Post-Baccalaureate Certificates: Tax Executive Postbaccalaureate Certificate, Taxation Postbaccalaureate Certificate, Closely-Held Business Taxation Postbaccalaureate Certificate, High Net-Worth Individual Taxation Postbaccalaureate Certificate, and International Taxation Post-Baccalaureate Certificate to primarily or completely online.

**The Carlson School of Management (Twin Cities Campus)**—Change program delivery modality in the Master of Business Administration (M.B.A.) to include both classroom (face-to-face) and primarily online options.

**The School of Public Health (Twin Cities Campus)**—Change program delivery modality in the Master of Science (M.S.) in Clinical Research from primarily online to completely online.

**The College of Arts, Humanities, and Social Sciences (Duluth Campus)**—Change program delivery modality in the American Indian Studies Graduate Minor from majority classroom to completely online.

**College of Education and Human Services Professions (Duluth Campus)**—Change program delivery modality in the Social Work Graduate Minor from classroom only to partially online.

**Swenson College of Science and Engineering (Duluth Campus)**—Add a partially online delivery modality in the Master of Engineering (M.Eng.) degree program.

### **III. Request for Approval of Discontinued Academic Programs**

#### **College of Design (Twin Cities Campus)—Discontinue the Housing and Community Development Undergraduate Minor**

The College of Design on the Twin Cities Campus requests approval to discontinue the Housing and Community Development Undergraduate Minor, effective summer 2022. In conjunction with the previous discontinuation of the Housing Studies major, the Housing and Community Development minor stopped accepting applications for the minor and reduced course offerings. The one remaining student has satisfied all minor requirements.

#### **College of Design (Twin Cities Campus)—Discontinue the Landscape and Design Planning B.E.D.**

The College of Design on the Twin Cities Campus requests approval to discontinue the Bachelor of Environmental Design (B.E.D.) in Landscape and Design Planning Degree, effective summer 2022. The Landscape Design and Planning B.E.D. is being discontinued with the start of the accredited, professional Bachelor of Landscape Architecture (B.L.A.) curriculum, which began fall 2021. Existing B.E.D. courses are being phased out as new B.L.A. courses are developed. A detailed transition plan was developed when the new program was proposed.

#### **College of Arts, Humanities, and Social Sciences (Duluth Campus)—Discontinue the English M.A.**

The College of Arts, Humanities, and Social Sciences on the Duluth Campus requests approval to discontinue the Master of Arts in English degree, effective summer 2022. The request is due to a change in administrative priorities. All students have graduated as of fall 2021.