

REVISED AND CORRECTED (March 24, 2021)

Proposed new academic units or proposals to disestablish, re-align or reorganize existing academic units must be included on the ABOR approved Academic Plan. With prior approval from the Office of the University Provost, the "Proposal to Make Changes in an Academic Unit" may be routed through the internal ASU proposal development and review process prior to ABOR meeting on the academic plan, although final implementation requires ABOR approval. That is, there is no required order of events for ABOR and internal approvals. Normally changes are considered by the unit, the relevant college/school committee if applicable, the college dean or school director, the Office of the University Provost, the Curriculum and Academic Programs Committee (CAPC) of the University Senate, and the University Senate, first reading and second reading/vote. Final decisions are made by the University Provost.

Mail completed proposal to CurriculumPlanning@asu.edu

Note: Depending on the scope of the change, in addition to completing this proposal, you may be asked to provide additional information related to budget, by-laws, promotion and tenure criteria, a transition plan for faculty, staff and students, etc.

UNIT INFORMATION

College/School/Institute or administrative area under which the proposed academic unit will exist: Ira A. Fulton Schools of Engineering

If within a subunit (e.g., school within a college), name the unit:

If a reorganization:

name of the existing unit: N/A

name of the new unit: School of Manufacturing Systems and Networks

Will new state resources be required to make this change? No

Requested effective term: Fall **and year:** 2021

Proposal Contact

Name:	Jeremy Helm	Title:	Senior Director Academic and Student • ENGR Academic & Student Affrs
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Administrator/Dean Approval

This proposal has been approved by all necessary unit and college level committees and the college/school have the resources to support the proposed new organization or reorganization. My signature below signifies that I strongly endorse the establishment of the proposed new unit or the organizational change. (Note: An electronic signature, an email from the dean or dean's designee, or a PDF of the signed signature page is acceptable.)

College/School/Division Dean/Administrator name: Kyle D. Squires



Signature _____ **Date:** 3 / 24 /21

College/School/Division Dean/Administrator name:
(if more than one college involved)

Signature _____ **Date:** / /20

Note: An electronic signature, an email from the dean or dean's designee, or a PDF of the signed signature page is acceptable.

This template is to be used only by a unit that has received specific written approval from the Office of the University Provost to proceed with internal proposal development for the establishment of a new academic unit or reorganization to an existing academic unit.

Note: Depending on the scope of the change, in addition to completing this proposal, you may be asked to provide additional information related to budget, by-laws, promotion and tenure criteria, a transition plan for faculty, staff and students, etc.

I. Description of the proposed organizational unit change

- a. Explain the nature of the change; i.e., formation of a new unit or reorganization of an existing unit.
The Ira A. Fulton Schools of Engineering is requesting the creation of a new school, School of Manufacturing Systems and Networks, within the Ira A. Fulton Schools of Engineering. The school, to be comprised of new faculty hired into the school along with current FSE faculty who choose to join the school, will become the new administrative home for the programs identified in Section IIc which are currently housed in The Polytechnic School.

This new school is a part of the reorganization of the Ira A. Fulton Schools of Engineering which also includes the renaming of the School of Computing, Informatics and Decisions Systems Engineering to the School of Computing and Augmented Intelligence

- b. Identify the existing unit(s) affected by the change and its place in the current organizational structure of the university.
The Polytechnic School is impacted by this change in that two of its current academic programs, four total degrees, will be moved to the School of Manufacturing Systems and Networks.
- c. If applicable, list any academic units to be disestablished as a result of the proposed reorganization.
n/a

II. Purpose and activities of the unit

- a. Explain the rationale for the change.
This reorganization is one part of FSE’s evolution towards global leadership in engineering education and research at scale. Further, the proposed reorganization is also timely in that it aligns with the New Economy Initiative being advanced for state support, though irrespective of funding outcomes at the state level has led to a framework for continued innovation and growth of the Fulton Schools. The New Economy Initiative represents a bold effort to ensure Arizona is prepared for a future economy that is dependent on a strong engineering base, accompanied by high employment, strong economic growth, and resilience to economic shocks. The New Economy Initiative includes the development of Science and Technology Centers (STCs) that would bring together faculty, students, and industry leaders to innovate, create, and produce, serving both learning and the objectives of industry partners.

Via its reorganization plan, the Fulton Schools of Engineering is seeking to position its schools and differentiate its programs to most effectively anticipate future opportunities. Foci critical to FSE’s current impacts and future opportunities are in computing, data science, artificial/augmented intelligence, systems engineering, advanced manufacturing engineering and science, and new paradigms for enabling technologically enhanced learners. These areas are important to ASU’s and FSE’s national leadership and impacts across the country and university. To accentuate our strengths and accelerate innovation, FSE is proposing,

- Creation of the School of Manufacturing Systems and Networks (the subject of this proposal)
- Renaming our current CIDSE school to School of Computing and Augmented Intelligence (see separate proposal)

- b. Identify the basic goals and objectives of the new or reorganized unit(s).
 - Advances our academic programs and research enterprise in manufacturing and systems engineering and closely related areas
 - Provides focus for many efforts related to the future of work (Industry 4.0, robotics and automation, human-machine teaming) broadly, and on the Polytechnic campus, specifically
- c. List all existing undergraduate and graduate academic programs, including degree programs, certificates and minors that will be housed in the proposed academic unit, whether new or reorganized.

Current School	Degree Type	Plan Code	Plan Description
TPS	BS	TSMEGRBS	Manufacturing Engineering
TPS	MSP	ESSYSMSP	Systems Engineering
TPS	MS	TSMEGRMS	Manufacturing Engineering
TPS	PHD	ESSYSPHD	Systems Engineering

- d. Identify the unit(s) that will assume the responsibilities of any units that are recommended for elimination.
n/a
- e. For instructional units, project the impact of this change on enrollment numbers over the next three years.
We expect enrollments to increase by five percent each year.

III. Resources

a. Faculty and staff

- i. List the name, rank, highest degree; and estimate of the level of involvement of all current faculty and professional staff who will participate in the new or reorganized unit. Also indicate the position each person will hold in the new unit.

Current faculty in the Fulton Schools of Engineering in relevant academic areas will be given a choice to join the new School of Manufacturing Systems and Networks. No current faculty in the Fulton Schools of Engineering will be reassigned to the new school as part of its launch.

- ii. List the clerical and support staff positions that will be included in the new unit.

Selected staff will be assigned to the appropriate unit, depending on the structure and needs of Ira A. Fulton Schools of Engineering and the School of Manufacturing Systems and Networks.

- iii. Indicate the number of graduate assistants who will be assigned to the new unit.

Selected graduate assistants from The Polytechnic School will be reassigned to the new School of Manufacturing Systems and Networks.

- iv. Project the number and type of new faculty and staff positions that will be needed by the unit during each of the next three years.

To be determined in consultation with the Provost and based on enrollment targets.

b. Financing

- i. Explain the plan for providing adequate financing for the unit. If state funds will be used, indicate whether new appropriations will be requested or if existing appropriations will be reallocated.

No new appropriations are involved in this realignment.

- ii. Identify sources for external funding for the unit

Not applicable

c. Physical facilities and equipment

- i. Identify the physical facilities that will be required for the new unit and indicate whether those facilities are currently available.

Physical facilities and space at the Polytechnic campus will be identified through consultation with Assistant Vice President for University Space Planning, Anne Gazzaniga. In addition, new facilities will be built on the Poly campus to support the new school and its faculty, staff, students and programs.

- ii. List all additional equipment that will be needed during the next five years and the estimated cost.

While no special equipment, materials or supplies are initially needed, investments in new equipment to support advanced manufacturing will be made.

d. Library resources, materials, and supplies

- i. Identify any additional library acquisitions that will be needed during the next three years and the estimated cost. Library resources will remain unchanged.

- ii. List any special materials or supplies, other than normal office supplies, that will be required by the new unit. No special materials or supplies are needed.

e. Other information

- i. Identify any implications of the proposed change for regional or programmatic accreditation.
There are no implications of this proposed change for ABET accreditation.

- ii. Provide any relevant information, not requested above, that will assist reviewers in evaluating the proposed change.