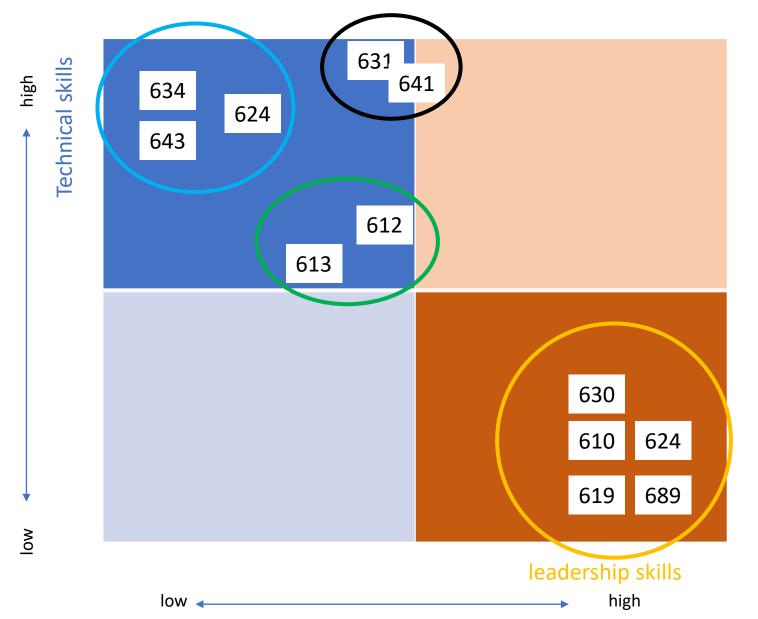
METM courses map

2021 year end program faculty retreat

Context

- The <u>purpose</u> of the mapping is to assess to what degree are the METM courses collectively aligned with the program objectives, particularly the balanced technical skills and professional competencies as well as practical learning and real word applications.
- METM professors collectively mapped courses based on the course contents and instructors teaching objectives.
- The mapping results provide a <u>holistic view</u> of the balance of the courses "the center of gravity" of the program and enabled the METM professors to analyze and articulate "long-term" <u>opportunities</u> to further align the courses with program objectives and enhance the linkage of individual courses.

Courses map results

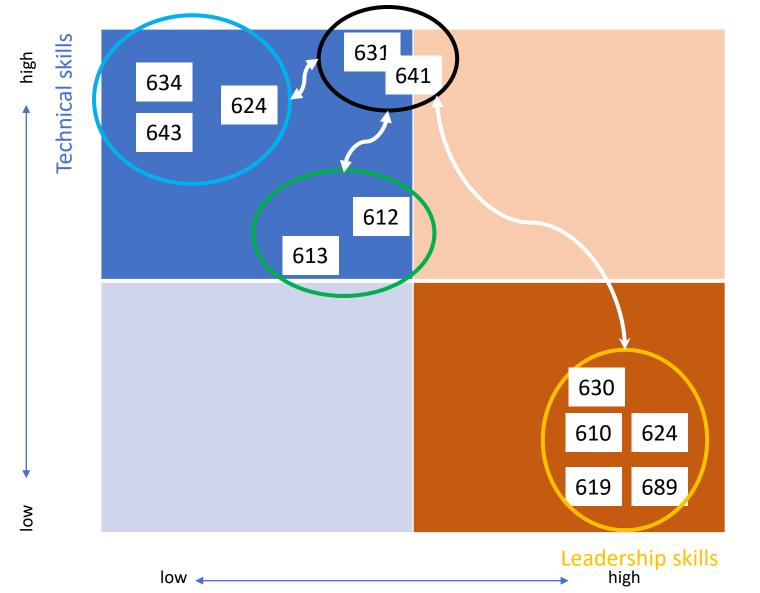


The assessment results of 12 courses are illustrated on the 2-dimensional chart (leadership skills vs. technical skills)

There four obvious clusters:

- 1. (blue): three courses (634, 624 and 643) focus on helping students develop technical skills for technology management
- 2. (orange): five courses (610,619,625,630,689) aim at providing leadership (soft) skill trainings for students
- (green): two courses (612 and 613) enable students to develop both technical and leadership skills
- 4. (black): two capstone courses (631 and 641) provide students the opportunities to identify and solve practical problems for their organizations.

METM enhancement opportunities



Three opportunities are identified to enhance the alignment the courses with the program objectives and the linkage of individual courses

Opportunity #1. to enhance technical contents (e.g. business topics analysis) of the five professional skill-focused courses (orange) to improve technical and leadership skills balance.

Opportunity # 2. to strengthen the linkages between Capstone courses and other courses and the program objective: practical learning & applications.

Opportunity #3. to encourage students to proactively engage their organizations to identify relevant, important technology and engineering management problems as Capstone project topics so that through the courses, students can create real value for their sponsoring organizations and increase their visibilities to the management.