

**COMMITTEE RECOMMENDATION FOR
College of Engineering and Mines
Engineering PhD**

STRENGTHS:

- PhD students contribute to large, multi-year grants and to faculty publications.
- Faculty states the program is inexpensive since it shares administrative costs and requires no additional faculty.
- MOU from 2017 with UAA allows students to obtain a PhD without satisfying residency requirements.
- MOU also requires research cooperation between co-chairs in Anchorage and Fairbanks and serves the goal to increase inter-campus collaboration.
- Student credit hours have been increasing steadily since 2018.
- CEM has recently undertaken a comprehensive strategic enrollment planning process.

WEAKNESSES:

- Enrollment numbers are low compared to undergraduate and MS programs.
- Lack of ability to offer an adequate number of graduate courses due to faculty attrition and/or overall enrollment declines.

OPPORTUNITIES:

- Increased focus on research should drive enrollment
- Research funding increased in 2020
- Increased collaboration with UAA

THREATS:

- CEM declines in general funds and research revenue
- Attrition and migration of faculty to other institutions
- Negative UAF news cycles have had effects on recruitment of high quality students
- Difficulty obtaining visas for international students
- Elimination of the PhD degree would reduce the attractiveness of the Engineering program as a whole to prospective and current students.

CENTRALITY TO MISSION:

- Central to UAF's core themes to educate, research, and prepare
- PhD students serve the goal of achieving tier 1 status.

INDICATORS OF QUALITY:

- Innovation and expansion through new Aerospace Engineering Minor and space grant research around UAVs has been a driver for recruitment.
- Dean's support of the program.

COST-EFFECTIVENESS:

Majors

Metric	Detail	FY16	FY17	FY18	FY19	FY20
Majors	PHD Engineering	25	15	12	18	16

Degrees

Metric	Detail	FY16	FY17	FY18	FY19	FY20
Degrees	PHD Engineering	5	2	2	1	1

FTEs

Metric	Detail	FY16	FY17	FY18	FY19	FY20
FTEs	Adjunct FTEs	0	0.1	0.1	0	0
FTEs	Faculty FTEs	0	0.1	0	0	0
FTEs	Staff FTEs	3.5	3.5	3.7	3.9	4
FTEs	Student FTEs	0	0	0.2	1	0.7

Expenditures

Metric	Program	Detail	FY20
Instructional Expenditures	CEM Engineering General	Unrestricted	378161.5
Salaries and Benefits	CEM Engineering General	Unrestricted	638505.1

Engineering PhD

RECOMMENDATION:	ADDITIONAL COMMENTS:	DATE FOR FOLLOW-UP:
Continuation: 2 votes		
Continuation w/ improvement plan: 6 votes	The committee recommends making efforts to strengthen the PhD program's cohort cohesion and improve the conversion rate of majors to graduates. The dean's input mentioned that the department is currently undergoing SEP, and asked the committee to consider this before making their recommendation.	