

## ACADEMIC PROGRAM REVIEW FORM

All academic programs and units at UAA are required by Board of Regents Policy P10.06.010 to engage in program review on a seven-year cycle. University Regulation R10.06.010 sets out the minimum requirements for program review, including centrality of program mission, quality, demand, program productivity, effectiveness, and efficiency. Exceptional reviews may be conducted, per University Policy and Regulation, and with the provost's approval. The UAA process integrates information about student learning outcomes assessment and the improvement of student learning, as well as progress on student success measures and the closing of equity gaps, aligning program efforts and resources with institutional priorities. Final decisions include commendations and recommendations, which guide future program efforts. The results of cyclical Academic Program Review are reported to the UA Board of Regents annually and are published on the UAA [Academic Program Review website](#).

This form is composed of four parts: the Program Section, the Dean Section, the Program Optional Response Section, and the Provost Section. Guidance for submission is provided in each section.

**Using the Form:** The form is pre-loaded with information specific to each program and posted on the [Academic Program Review website](#). The program should download and save their form to begin using it. The form is locked, so instructions are viewable and the only sections of the document that can be edited are the form fields.

The form uses narrative boxes, text only, and drop-down boxes. Narrative boxes have a character limit, which includes spaces. To undo an answer, press "Control-Z" or "Command-Z."

Responses are to be narrative text only, and must be ADA and FERPA compliant. Do not embed any tables or links, including to webpages or other documents. To be FERPA compliant, do not include the names of any current or former students. Rather, use statements such as, "In AY21 four program graduates were accepted to graduate programs in the field." Programs with specialized accreditation or other external recognitions must comply with restrictions regarding what may be published, as per the accreditor or external organization. Do not include appendices. Appendices to this form will not be accepted.

**Data:** Each program is provided a datasheet, along with this pre-loaded form. For questions about the data, please contact Institutional Research ([uaa.oir@alaska.edu](mailto:uaa.oir@alaska.edu)).

**Assistance:** For technical assistance with this form, email Academic Affairs ([uaa.oaa@alaska.edu](mailto:uaa.oaa@alaska.edu)).

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**Program(s) in the review:** MS Project Management

**Specialized Accrediting Agency (if applicable):** Project Management Institute Global Accreditation Center for Project Management Education Programs

**Campuses where the program is delivered:** Anchorage KOD KPC MSC PWSC

**Year of last review:** AY2020

**Final decision from last review:** Continued Review

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## **PROGRAM SECTION (Due on March 1)**

*The program review committee chair and committee members are assigned by the dean. All program faculty should be included in the review process, including faculty on the community campuses. After completing the Program Section below, the program review committee chair will sign, date, and email this form to the dean, copying all committee members. If the program is fully delivered on a community campus, copy the appropriate community campus director(s). The program review committee chair's signature and date lines are at the end of the Program Section.*

### **Program Review Committee:**

LuAnn Piccard, Associate Professor, Project Management (ANC), Chair

Roger Hull, Term Assistant Professor, Project Management (ANC)

### **1. Demonstrate that the program has responded to previous recommendations.**

***Recommendation 1: Propose and put forward curriculum to be implemented in fall 2021 for an Accelerated Masters with CTC baccalaureate programs Construction Management and Advanced Technology Leadership, as well as other Engineering programs within the College.***

**How do you know the recommendation has been successfully achieved? (2000 characters or less)**

In 2020, in partnership with UAA Provost Runge, the Project Management (PM) Department led expansion of scope for Accelerated Masters' beyond a bridge to UAA MSPM from College of Engineering (CoEng) undergraduate engineering and Community and Technical College (CTC) BSCM and BSATL programs to include any graduate program at UAA, UAF and UAS. Also, approval for Accelerated Master's programs is now at Major Academic Unit (MAU) vs. UA Board of Regents (BoR) level. BoR Regulations changes were prepared, reviewed and approved by faculty governance bodies at each MAU and UA Academic Council. BoR Regulations changes were approved by UA Legal, UA President Pitney and BoR in January 2021.

UAA MSPM Accelerated Master's Program was submitted for review through UAA governance processes and approved in Spring 2021 with implementation beginning in Fall 2021.

Other key enrollment and access initiatives:

MSPM Concentrations in Leadership and Management in partnership with CBPP's MBA program (approved AY20). Concentrations provide additional educational pathways for students while leveraging existing resources.

Graduate Certificate in Project Management (GCPM) was approved in Fall 2020 and began admitting students in fall 2021 after NWCCU approval. The GCPM provides career enhancement and an accelerated pathway to or a quick pivot into a high-growth/high-demand career. The 18-credit GCPM is a gateway program to the full 33-credit MSPM by fully leveraging all courses.

The Minor in Project Management (implemented AY20) and stacking most PM courses (400/600) provide opportunities for undergraduates from any UAA discipline to take PM courses. As of AY21, 400-level students from initial target disciplines (CoEng, CTC and Business) account for approximately 20% of enrollments in PM A401/601: Project Management Fundamentals.

Addition of on-line, asynchronous section of ESM A450 in addition to live, hybrid course has increased enrollments of UAA and UAF students.

**Actions taken to date (2000 characters or less)**

BoR Regulation changes were prepared (spring 2020), reviewed and approved through UAA, UAF, UAS governance processes, Faculty Senates, UA Academic Council (fall 2020), and approved by UA President Pitney and BoR in January 2021.

PM Department submitted the MSPM Accelerated Master's through UAA governance processes (Graduate Council and Graduate Academic Board), Faculty Senate, and OAA processes, receiving approval in Spring 2021. Implementation began in Fall 2021. Outreach to potential students began in Spring 2021 and continues with initial emphasis on CoEng disciplines and CTC Construction Management (CM) and Applied Technology Leadership (ATL) programs. Active student advisory connections have been established.

MSPM Concentrations (approved AY20) expand enrollments in CBPP MBA program courses and provide additional education pathways for students.

The Graduate Certificate in Project Management (GCPM) was approved in Fall 2020 and began accepting applications in 2021 after NWCCU approval. PMI-GAC Accreditation for the GCPM (in addition to currently accredited MSPM) is in process.

Regular and active advisory collaboration between PM Department, CoEng disciplines, and CTC CM and ATL programs are taking place to inform and encourage potential students to pursue the Minor in Project Management and MSPM Accelerated Masters.

PM Department added an on-line, asynchronous section of ESM A450 in addition to live, hybrid course. This on-line course is taken by students across Alaska and by many UAF students during the regular academic year and summer.

**Evidence of success to date (2000 characters or less)**

Accelerated Master's outreach and advising conversations between PM Department, CoEng disciplines and CTC Construction Management (BSCM) and BS Applied Technology Leadership (BSATL) programs began in fall 2021 and are on-going. Interested and eligible students have been encouraged to consider enrollment in this program. Student feedback has been positive.

Approximately five students have declared MSPM concentrations in Leadership or Management.

The Graduate Certificate in Project Management has seven students enrolled as of fall 2021. Application for GAC accreditation for the GCPM was submitted on March 1, 2022.

Three students have completed the Minor in Project Management and approximately five are currently pursuing.

***Recommendation 2: Determine within two years if the initiatives result in increased enrollment.***

**How do you know the recommendation has been successfully achieved? (2000 characters or less)**

Per UAA IR data provided in February 2022 and department analysis, enrollments in PM courses and admissions have reversed downward trends that began in AY18.

In AY21, PM course enrollments and admitted students have surpassed AY18 levels and are approaching AY17 levels which are considered steady-state targets.

An on-line asynchronous section of ESM A450 added to existing in-person and hybrid courses has increased enrollments including UAA and UAF students.

Enrollments in ESM A450, a required course for several CoEng engineering programs, have grown slightly since AY19 (total ESM numbers adjusted for MSEM and MSSM teach out in AY19).

**Actions taken to date (2000 characters or less)**

Factors that triggered a sharp decline in AY18-19 included industry downturns in Oil & Gas and Construction, effects of MSEM and MSSM program discontinuance, physical move from University Center to EIB which lost visible presence and signage, and UAA website misclassification of MSPM program as a fully on-line vs. a hybrid (F2F and live synchronous) program. Each of these items was analyzed and actions implemented to address or mitigate.

MSPM 100% super-tuition was reduced to 20% (consistent with all CoEng and CBPP courses) began implementation in AY19 to increase student access and affordability.

PM Department collaborated with PM Advisory Board to adopt a singular focus on increasing enrollments through targeted outreach in existing and emerging sectors.

Active coordination and collaboration with CoEng, CTC and CBPP colleagues to provide additional educational pathways for students through access to the Minor in Project Management, MSPM Concentrations, and Accelerated Master's.

Significant emphasis on recruitment of military students (active duty and veterans). Approximately 50% of PM students have military background. An on-site section at JBER was scheduled for spring 2022 but cancelled due to low enrollments. Plans in place to re-offer in fall 2022.

Increased engagement with ANSEP to encourage students to consider PM as a featured career path (MSPM and Minor in Project Management).

Continued emphasis on implementation of approved "Re-recruitment" program which provides a smooth path to graduation for previously stopped-out students.

Emphasis on building "high-touch", family-like relationships with students and alumni to build a lifelong community of belonging, a desire to give back, mentoring, networking, and career counselling.

On-line, asynchronous section of ESM A450 added to increase access for students located outside of Anchorage, UAF students, students with field assignments, and students with asynchronous on-line modality preference.

**Evidence of success to date (2000 characters or less)**

Per UAA IR data provided in February 2022, AY21 PM Student Credit Hours (SCH) and admitted students increased above AY18 levels (minimum steady state). AY22 is approaching or exceeding AY17 levels (target). Program is well-positioned for continued positive growth to achieve stretch goals based on industry and student demand.

AY 22 (preliminary) compared to AY 19 ( or other AY low points):

\*SCHs: +86% (615 vs. 330)

\*Admitted students: +88% (60 vs 32)

\*Unduplicated students: +27% (85 vs. 67 in AY20) (Note: AY20 was lowest point)

\*Graduates: -20% (9 in AY21 vs. 11 in AY19) (Note: Lower number in AY21 is due to pipeline depletion which is now refilled. AY22 expected to exceed AY19)

One of few UAA programs experiencing continued, positive growth through COVID.

Fourth largest graduate program at UAA (2021 enrollments).

ESM A450 enrollments have remained steady since AY19 with a slight increase anticipated in AY22 based on fall and spring enrollments.

**2. Demonstrate the centrality of the program to the mission, needs, and purposes of the university and the college/community campus. (2500 characters or less)**

UAA PM offers the only degree-granting project management programs in Alaska. PM meets both UA and UAA missions to support workforce development in the high demand job field of project management. Global projections include 2.2M new project management roles annually through 2027 (Job Growth and Talent Gap in Project Management 2017, PMI) with more than 10,000 in Alaska. Alaska is a project state; nearly every initiative across all sectors is a project that fuels economic growth and employment. Average salary for MSPM graduates in Alaska is \$150K, and many serve as senior executives for major corporations in Alaska and beyond. While the PM program is in the College of Engineering, graduates can and do work in a variety of fields from Engineering to Construction to IT to Healthcare. Since 2020, the PM Department has introduced two MSPM concentrations in partnership with CBPP, a Graduate Certificate in Project Management, and an Accelerated Master's in Project Management, all leveraging existing resources. These new programs build on the existing strong MSPM program and the Minor in Project Management (introduced AY20). The Program teaches a required course for the MSME and MSCE programs. PM

Department delivers ESM A450, a required course for several CoEng undergraduate disciplines at UAA and UAF. Students from many other disciplines benefit from PM courses to enhance skills. PM has reversed enrollment declines seen in AY18-AY20. Enrollments have returned to AY17 steady state levels and are on track to achieve AY16 target levels. PM is one of few departments experiencing continued positive growth through COVID. PM provides a student-centric, practice-based learning environment, offers a range of new educational pathways for students while leveraging existing resources, and utilizes a flexible, hybrid delivery modality that meets students where they are at. The 24-member PM Advisory Board is active and includes several MSPM Program alumni, many of whom also guest lecture, advise, and mentor students. The chair of the PM department is a leader in the profession as a member of the global PMI Board of Directors. The PM Department has a strong relationship with the PMI-AK chapter providing opportunities for student projects, scholarships, student memberships, and professional networking. PM students have applied their skills internally by mentoring and managing projects for undergraduate student clubs such as UAA Robotics, Baja Car, and Rocketry.

### **3. Demonstrate program quality and improvement through assessment and other indicators.**

#### **a. Program Student Learning Outcomes Assessment and Improvement Process and Actions**

##### **i. MS Project Management**

- *Demonstrate the capability to manage end-to-end projects successfully across a broad range of scale, complexity, scope, environments and inherent risks and constraints through appropriate selection, tailoring and application of knowledge, processes, approaches, tools and techniques; Demonstrate ethical, versatile, and culturally aware leadership, stakeholder engagement, change leadership, and communication skills in a broad range of organizational contexts; Demonstrate ability to enhance success of organizations through alignment of project outcomes with strategic objectives and operational drivers; Demonstrate a facility for comprehensive and objective analysis, structured decision-making, process optimization, and problem solving in the project management environment; Conduct research that contributes to and expands the diverse project management body of knowledge.*

##### ***Describe your key findings for these outcomes. (3000 characters or less)***

MSPM is accredited by PMI-Global Accreditation Center (GAC) the specialized accrediting body for project management academic programs world-wide. MSPM was one of the first 13 programs accredited (2007) and is considered an academic leader in PM. The MSPM Program completed its third successful cycle GAC accreditation in fall 2021 and received the maximum possible term of accreditation (five years) from October 2021-November 2026. The MSPM Program was found to be aligned with all GAC accreditation standards and demonstrated evidence of achievement of students' program and course learning outcomes. Evidence was provided to GAC of a robust continuous improvement process to identify and address gaps and pursue opportunities. The Program submits annual reports to GAC to demonstrate continued alignment with standards of accreditation, outcomes assessment and continuous improvement. Any gaps or concerns require submission of an action plan.

The multi-year MSPM Assessment report and plan was reviewed and approved by the UAA Assessment Committee in January 2021. Annual reports are provided as required.

Assessments of targeted course and program learning outcomes and the overall learning environment are conducted by faculty each semester and annually.

Industry members serve as Capstone Project advisors and participate in panels that evaluate student work in classes throughout the program. This engagement provides relevant, real-time feedback to students reflecting professional expectations and practice.

***Describe actions taken to improve student learning for these outcomes. (3000 characters or less)***

Areas of continuous improvement for curriculum, learning environment, and delivery modality are identified, reviewed and actions taken each semester and annually. Specific actions include enhancement of course content in selected areas to remain current with professional practice (in particular Agile methodologies), adjustments to improve the hybrid learning environment, and strengthening qualitative assessment methods utilized to assess leadership and communication. Major curricular changes are aligned with GAC accreditation standards and professional standards in project management. These updates are reported and reviewed annually by GAC and PM Advisory Board. Industry leaders advise student capstone projects and participate on panels to review students' course activities. Additionally, the Program requests feedback from the PM Advisory Board and improvements are made to ensure currency and relevance of the program and courses compared to professional expectations for target sectors. PM professional training courses are taught to local companies and organizations. Observations and reflections regarding professional training students' gaps in knowledge influence academic courses to further strengthen outcomes to meet employers' expectations and students' educational and career goals.

***Describe evidence that these actions are working. (3000 characters or less)***

MSPM graduates are highly sought-after, well-compensated and hold critical leadership roles in major companies and organizations driving economic value in Alaska and beyond. Some employers include Conoco Phillips, Alyeska, Hilcorp, ASRC, US Army Corps of Engineers, Jacobs, Alaska Communications, Doyon Drilling, GCI, Quintillion, DOWL Engineering, Davis Constructors, Lynden, Carlisle, Providence, State of Alaska Department of Transportation, Amazon, Microsoft, and Facebook. Employers actively seek out graduates from the MSPM program. Many alumni in senior leadership positions recruit from the MSPM program. For example, MSPM alumni working in leadership roles at several local companies have hired 3-4 MSPM graduates in the past few years.

Most alumni remain actively engaged with PM and faculty. Faculty frequently receive student testimonials that attribute their professional success to the Program.

Undergraduate students that complete the Minor in Project Management can differentiate themselves in the job market with PM skills. American Society of Engineering Educators cites PM as one of the Top-5 skills most needed by graduates of undergraduate engineering programs

as they enter the workforce, and that PM is also one of the Top-5 missing skills. UAA's strong engineering programs AND a Minor in Project Management helps UAA engineering graduates distinguish themselves and "hit the ground running" as they enter the workplace.

- b. Demonstrate program quality and improvement through other means, for example, maintaining specialized accreditation, using guidance from advisory boards/councils, responding to community partners and local needs, maintaining currency of the curriculum, implementing innovative program design, intentionally integrating high-impact teaching and learning practices into the program, and meeting indications of quality in distance education, such C-RAC Standards. (3000 characters or less)**

Accreditation: MSPM and MSPM with Concentrations in Leadership and Management are accredited by PMI-GAC, the specialized accrediting body for project management academic programs world-wide. The Graduate Certificate in Project Management was submitted for GAC accreditation on March 1, 2022 is currently under review.

Professional Standards: The Program is aligned with Project Management Institute (PMI) professional standards. PMI is the largest PM professional association with over 800,000 members and 1.8M credential holders in over 210 countries.

Professional Credentials: The MSPM program prepares students to sit for the Project Management Professional (PMP) and the Certified Associate of Project Management (CAPM) certification exams. PMP is recognized by employers and professionals as the global gold standard credential for project management and is rapidly becoming a requirement for hiring PM positions. Globally, more than 1.2M project professionals hold the PMP credential.

Industry Advisory Board: The 24-member PM Advisory Board meets twice each semester and is actively engaged in the program providing guidance, advocacy, and review of curricular changes aligned with industry needs. Many PM AB members guest lecture, advise students, and act as mentors in and outside of the classroom. These PM AB members contribute to bringing "industry into the classroom".

Distance Education: Since 2006, the program has been a pioneer in hybrid, F2F/Realtime distance education which utilizes an innovative hybrid distance delivery modality that facilitates hands-on, engaged learning in flexible and professional learning environment. All students attend the same class session either in person or by live video. Besides providing access and flexibility for students, this approach develops students' skills to successfully lead global, virtual teams.

Industry Alignment: The PM Chair is a member of the PMI global Board of Directors serving over 800K members and 1.8M credential holders in over 210 countries. This role ensures that leading edge industry practices are incorporated into teaching and learning.

High Impact Practices: Students experience a highly-interactive reflective learning environment tailored to working professionals where concepts learned in class can be immediately applied in the professional environment. The curriculum provides at least three opportunities for students to manage increasingly complex projects end-to-end. This rigorous experience is a key

differentiator for our program and is recognized by our specialized accreditor (GAC), employers, students, and alumni.

**4. Demonstrate student success and the closing of equity gaps.**

- a. Analyze and respond to the disaggregated data in the data sheet for your program. Provide clarifications or explanations for any positive or negative trends indicated by the data, and discuss what you are doing to close any equity gaps. The Student Success program review metrics are Junior Graduation Rate, Associate Graduation Rate, Semesters to Degree – Graduate Programs, and Course Pass Rates by Course Level. (3000 characters or less)**

Disaggregated Data from Data Sheet:

Semesters-to-Degree for MSPM Program: On average over the AY17-21 review period, MSPM students took 7.6 semesters to graduate with a range of 7.1-8.2 semesters. This value has remained relatively constant during the five-year review period.

This Semesters-to-Degree performance is not surprising because approximately 90% of MSPM students work full-time and attend the program part-time vs. full-time. They average 1-2 classes per semester, which translates to approximately eight semesters to complete the 11-course, 33-credit MSPM degree. To reduce elapsed time, elective courses are offered in summer. The 18-credit (6 course) Graduate Certificate in Project Management will shorten Semesters-to-Degree for students that prefer a “PM Core without Capstone” approach.

Diversity Equity and Inclusion:

Gender and Ethnic Diversity: PM is proud of our gender and ethnic diversity. Since AY17 PM gender diversity has averaged 40% female, 60% male with an average age of 34-35. From AY17-21, approximately 50% of PM students report as persons of color, reaching 59% in AY22 (preliminary). These ratios ensure diversity of perspective and background among students, contributing to a vibrant, diverse and inclusive learning environment that reflects the PM profession and organizations, and people served.

ANSEP Engagement: PM actively engages with ANSEP to provide career pathways to PM for Alaska Native students. PM and ANSEP share a donor that provides scholarships to PM students and ANSEP students in PM.

Alumni Leaders and Mentors: Many of our female and persons of color alumni are actively engaged on our PM Advisory Board, conduct guest lectures, and serve as mentors for our students. The Chair of our PM Advisory Board is an African-American female and a MSPM alumnae. Several of our Alaska Native female alumni serve in executive leadership roles in Alaska Native Corporations. We have other alumnae that lead women-owned engineering, construction, and hospitality businesses. PM wants all of our students to see themselves in us, in their student colleagues, and across our profession.

Reduced Super-tuition: In 2019 super-tuition was reduced from 100% to 20%. This change increases access and affordability for students and is now consistent with all CBPP and CoEng courses.

Hybrid Distance Learning: This modality ensures that any student, no matter where they are located, can attend the Program increasing access and inclusion. It also provides flexibility for full-time working professionals balancing careers, family, and higher education without sacrificing academic rigor and student achievement. This modality has proven especially critical for our female students, many of which are primary family care-givers. A significant number were pregnant and gave birth while completing the program. For them, our flexible course delivery modality made the difference between persisting to graduation and stopping out.

**b. Provide evidence of the overall success of students in the program, e.g., the percent of students who pass licensure examinations, the percent of students who go on to graduate school, the percent in post-graduation employment in the field or a related field. (3000 characters or less)**

90% of MSPM students are working professionals in the PM field. During and upon completion of the program, students are promoted and receive salary increases based on making measurable contributions to their organizations. Virtually all full-time students are recruited for full-time positions during the program, often recruited by MSPM alumni. Most students successfully pass the PMP and CAPM exams while completing the program or shortly after graduation. The PMP credential, held by over 1.2M professionals globally is recognized as the profession's gold standard and is often required for PM employment. Pass rates are not automatically reported to the Program but students regularly communicate those results to faculty.

MSPM graduates hold senior leadership and operational positions in all key sectors in Alaska's economy. Example titles held are CEO, President, Vice President, Senior Director, Program Manager, Project Manager, and Project Engineer. They lead transformational change initiatives including digital transformation, new opportunity development, and key initiatives requiring complex, cross-organizational integration. They are recognized for balanced technical, leadership, and strategic skills and ability to produce strategic outcomes in broad organizational and industry contexts.

Information provided by MSPM students and alumni, and position descriptions for PM's in Alaska, estimate average salaries of approximately \$150,000 year.

Military students represent 50% of the MSPM student body. Program completion leads to promotion into key active-duty leadership roles. Other military students use PM to successfully bridge to civilian careers. They bring valuable experience to the Program and learn new skills that are fully leveraged into civilian careers. Military students say that PM is one of the best degrees for transitioning personnel.

Many students are pivoting between careers. A PM skill set is highly transferable across industry sectors and facilitates multiple career pathways. For example, a graduate working in project controls in Oil and Gas was hired by Facebook to manage their national facilities project portfolio. Another student from Oil and Gas lost her job during that industry downturn, and was hired as an IT project manager. Another student was a technical writer before completing the

program and was hired by Amazon to lead their global internship program. Another graduate advises Microsoft's C-suite on organizational transformation initiatives. Each of these students was hired because of their project management and leadership skills, and their ability to mobilize people to produce outcomes aligned with strategic goals, rather than specific industry subject matter expertise.

Undergraduate engineering students completing the Minor in PM leave UAA with an additional skill-set that differentiates them from other engineering graduates and positions them to hit-the-ground running in a project-based workplace.

## 5. Demonstrate demand for the program.

- a. **Analyze and respond to the data in the data sheet for your program. Provide clarifications or explanations for any positive or negative trends indicated by the data, and discuss what you are doing to improve. The Demand program review metrics are Ratio of Out-of-Discipline Credit Hours to Total Credit Hours, Number of Program Graduates Who Continue Education, Number of Program Graduates Who Return to UAA to Pursue an Additional Program, and Gap between Job Openings and Degree Completions. (Note: Gap between Job Openings and Degree Completions not required for AY22 Program Reviews.) (3000 characters or less)**

Disaggregated Data:

Metrics provided in the data sheet provide insight into internal demand for Out-of-Discipline credit hours averaging 11% each year and show students from other majors (e.g. MBA, MSCE, MSME) are taking PM courses. This number could grow with expanded internal outreach.

Data for number of graduates who continue education or return to UAA to pursue an additional program in AY17-19 were in low single digits consistent with graduate degree programs; only a small number of students pursue a second master's degree after completing their first. Two MSPM graduates in the past two years applied for PhD programs.

However, AY20-21 figures increase to 14-18 students per year planning to pursue another graduate degree and return to UAA. The significant difference between AY17-19 and AY20-21 seems suspect. That data may include undergraduates who took PM courses or completed the Minor in Project Management and plan to return for a graduate degree. If true, that is good news. This data needs to be explored further.

Externally-driven Industry and Student Demand suggest significant growth opportunities for PM:

Project Management Institute (PMI): By 2027 employers will need almost 88M individuals working in project-management oriented roles globally, with 8.8M in the US. Beginning in 2018, PMI forecasts more than 2.2M project management jobs will be created annually in the US due to increased demand and retirement attrition. PMI forecasts \$22.5B risk to US GDP due to project management talent shortage. (Job Growth and Talent Gap in Project Management 2017, PMI).

State of Alaska Department of Labor and Workforce Development (SOADOLWD): PM-specific employment data is difficult to estimate from SOADOLWD industry categories because PM positions are in all industry sectors' companies and organizations. These include construction,

information technology, engineering, manufacturing, resource development (e.g. oil and gas and mining), telecommunications, government, military, transportation/logistics, healthcare, tourism/hospitality, education, and others. Their October 2020 Alaska Economics Trends projects 10-25% job growth between 2018-2028 in multiple sectors with high-demand for project managers. The Federal Infrastructure Investment and Jobs Act (November 2021) will increase demand for experienced and qualified project managers leading key infrastructure projects in Alaska. Analysis of SOADOLWD data produced by UAA IR in September 2021 indicates a need for close to 2700 entry level PM-oriented positions in 2025 and over 7,100 general and operational management positions, many of which are PMs or require PM skills.

LinkedIn Analysis: 11,000 professionals within 100 miles of 99501 include project management in their job description and represent every industry and organizational sector key to Alaska's economic growth. This represents a skillset required by over 10% of Alaska's professional-managerial workforce.

## **6. Demonstrate program productivity and efficiency.**

**Analyze and respond to the data in the data sheet for your program. Provide clarifications or explanations for any positive or negative trends indicated by the data, and discuss what you are doing to improve. The Productivity and Efficiency program review metrics are Five Year Degree and/or Certificate Awards Trend, Student Credit Hours per Full-Time Equivalent Faculty, and Full-Time Equivalent Student per Full-Time Equivalent Faculty. (3000 characters or less)**

Since lows experienced in AY19, the Program continues to experience stable or positive trends in enrollments, student credit hours, graduation rates, persistence, diversity, time to graduate, cross-disciplinary collaboration and other important institutional productivity measures.

Per the Data Sheet provided and PM Department analysis, the Program has reversed SCH/FTEF and FTES/FTEF trends experienced in 2018-2020. Metrics in AY21 show significant improvement compared to period between AY18-20 and are now equivalent to AY17 figures which are considered target levels for the Program.

More than 90% of PM students are full-time working professionals and not full-time students, so the FTES/FTEF metric may not be the best productivity measure for the PM student population.

PM has only two full-time faculty members and a small number of active adjunct faculty members. PM courses are taught as a single course with a common student cohort including all students attending either in-person or via live distance and stacked at 400/600 levels. This approach optimizes resources, enhances the student experience, and accommodates military students whose benefits rely on an in-person option. Capturing this information by "section" helps PM plan for classroom resources and understand students' in-person and live distance attendance requirements and preferences. Unfortunately, this "multi-section" reporting structure can skew faculty productivity measures because an actual, single 20-student cohort appears as four small sections. Also, high-impact, one-student courses (e.g. internships, independent studies, and directed studies) are not counted in faculty workloads and reflect negatively on faculty productivity measures due to 1-1 delivery.

One adjunct faculty teaches two sections of ESM A450 in both fall and spring semesters and one section in summer. Annual enrollments average 135, generating approximately \$137,000 at a cost of \$40,000.

**Optional: Discuss the extent to which, if any, extramural funding supports students, equipment, and faculty in the program. (2500 characters or less)**

The Program generates ~\$50,000 in incremental revenue annually through professional training for companies and organizations in Alaska. In addition to revenue generated, these courses help recruit students for the Program and contribute insights for curriculum development.

The Program receives approximately \$10,000 in student scholarships each year from local companies and PMI-Alaska Chapter.

- 7. Assess program distinctiveness, as well as any duplication resulting from the existence of a similar program or programs elsewhere in the University of Alaska System. Is duplication justified, and, if so, why? How are you coordinating with UAA's community campuses and the other universities in the system? (2000 characters or less)**

The UAA PM Department is the single source of project management academic degrees in Alaska. This includes the UA System as a whole (UAA, UAF, and UAS) and any other institution of higher education in Alaska including Wayland Baptist, and others.

The Program's innovative hybrid, in-person and real-time distance delivery modality (offered since program inception in 2006) allows students to attend from anywhere in Alaska or outside of Alaska using currently available off-the-shelf technology. It also allows students with rotational jobs, field assignments, business travel, and school-life-family challenges to attend in person or by distance as needed during the semester. This modality also encourages students to attend the Program from outside of Alaska (domestic and international), those transferred for employment/military while completing the program, and deployed military students. These students comprise approximately 25-30% of PM students each semester.

ESM A450 is a required course for most undergraduate engineering programs at UAA and UAF, and is available for UAA and UAF students in-person or on-line. The PM Department is responsible for developing and teaching this course as a hybrid and asynchronous on-line course. UAF offers only one section of ESM A450 per year, so the PM Department's ESM A450 course also serves UAF students in semesters when it is not offered there.

- 8. Assess the strengths of your program and propose one or two action steps to address areas that need improvement. (3500 characters or less)**

Strengths:

People: PM has amazing students, faculty, staff, alumni, advisory board that all contribute to creating a vibrant program well aligned with industry needs and student educational goals. PM's family style approach creates a strong sense of belonging during and long after graduation. Our talented, motivated students reflect the diverse spectrum of the PM profession and contribute to learning of others. Alumni are mentors, instructors, advisors and members of the PM Advisory Board. They are role models for current students helping them see themselves in the profession

and diverse PM jobs they can aspire to. Two full-time faculty and two adjuncts have more than 130 years of industry experience outside of academia.

**Industry Alignment:** PM is fully aligned with industry through professional standards, GAC accreditation, Advisory Board, and leadership positions in PMI at local, national and global levels. PM leads from the front of our profession and brings leading edge insights into the classroom. PM is relevant, practical, and forward-leaning.

**Student Centricity:** Students are at the heart of PM. Their needs drive curriculum, scheduling, advising, hybrid modality, mentoring, job referrals, and engagement during and after completing the program. We always find a way to yes.

**Hands-on, reflective learning:** Students experience project management in a hands-on, reflective learning environment, and apply what they learned in class the next day in the workplace. Students practice communication and diverse stakeholder engagement using a variety of approaches and receive direct feedback from industry leaders. They have at least three opportunities to execute projects end-to-end.

**Opportunities for improvement/growth and Actions to Implement:**

**Power Skills:** Improve and innovate ways to develop, enhance and assess “Power Skills” such as multi-modal and virtual communication; stakeholder engagement; inclusive, empathetic, cross-cultural leadership, virtual-hybrid team leadership.

**Curriculum and Modality Refresh:** Anticipating future needs, the Program should refresh the curriculum to include emerging trends and new ways of working. This refresh should enhance delivery modality and incorporate flipped-classroom approaches to optimize live-session interaction and team-based learning, and accommodate more students from outside of Alaska’s time zone.

**Invest in outreach to support growth opportunities:** There is a significant opportunity for growth in PM enrollments. 1000s of PM jobs are created annually in Alaska though growth and attrition. PM is an essential, practical and versatile skill set in high-demand across all key industry sectors. All of our outreach today is “word of mouth”. A small investment in focused outreach would easily double enrollments. PM may be one of few programs poised for significant growth based on demand in Alaska and beyond.

**Hire more faculty & staff to drive growth:** PM has two full-time faculty members and has held off hiring until enrollments stabilized and returned to target levels. Now is the time to invest for growth.

**BSPM and BS Certificate in PM:** A collaborative BS PM program with an emphasis on digital transformation and Artificial Intelligence could be created immediately by leveraging existing PM, CS&E and CPBB courses, and be a leading-edge source of distinction for UAA to meet critical, growing unmet workforce needs in Alaska and beyond. Add a BSCPM using existing 400-level PM courses.

*After completing the Program Section above, the program review committee chair should sign, date, and email this form to the dean, copying the committee members. If the program is fully delivered on a community campus, copy the appropriate community campus director(s).*



Committee chair's signature: \_\_\_\_\_

Date: 3/5/2022

END OF PROGRAM SECTION

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### DEAN SECTION (Due on April 1)

*If the program is fully delivered on one or more community campus, the dean should consult with the director(s) of the campus. After completing the Dean Section below and signing it, the dean should email this form to the committee, and to [uaa.oaa@alaska.edu](mailto:uaa.oaa@alaska.edu). If the program is delivered on a community campus, copy the appropriate community campus director(s). The program has one week to provide an optional response to the Dean Section using the Program Optional Response section of this form.*

#### Evaluation of Progress on Previous Recommendations

**For each recommendation from the last program review, indicate if the recommendation has been met or has not been met and provide commendations and guidance as appropriate. (2000 characters or less for each recommendation)**

***Recommendation 1: Propose and put forward curriculum to be implemented in fall 2021 for an Accelerated Masters with CTC baccalaureate programs Construction Management and Advanced Technology Leadership, as well as other Engineering programs within the College.***

Recommendation has been met.

The MSPM Accelerated Master's Program is in place, thanks to the program's efforts changing BOR policy to allow local accelerated programs, and pathways created from undergraduate programs along with the creation of a graduate certificate.

***Recommendation 2: Determine within two years if the initiatives result in increased enrollment.***

Recommendation has been met.

Student headcount and credit hours have increased steadily since 2018 and growth continues to look strong. The program is to be commended on its approach to retain, reach back, and recruit new students. Infrastructure projects in Alaska and Department of Labor forecasts predict demand for project managers in Alaska.

**Provide your analysis of #2-8 below, based on the data provided and the program's responses above.**

#### 1. Centrality of the program. (1750 characters or less)

I concur with the program's response. The PM program is important to Alaskan industry, nonprofit, and government sectors with demand both nationwide and globally. Within UA, PM offers a pathway to a Master's Degree for programs across several colleges at UAA and also from UAF and UAS. Students in the MSPM have also been utilized to great effect to apply their craft to UAA projects (e.g. managing the competition plan for the robotics club).

**2. Program Quality and Improvement (1750 characters or less)**

The program was recently reaccredited by PMI-GAC and was lauded for their achievement of student learning outcomes and program quality, which includes regular assessment and continuous improvement.

**3. Student Success and the Closing of Equity Gaps (1750 characters or less)**

PM has been offering all courses using a hybrid distance model for years, which helps accommodate student needs. Additionally, the program has the greatest ethnic and gender diversity of our engineering programs. Successful student placement upon graduation is another indicator of student success.

**4. Demand (1750 characters or less)**

The rising enrollment numbers and projections from DOL and PMI indicate rising demand for project managers.

**5. Productivity and Efficiency (1750 characters or less)**

The academic program has operated very efficiently, with just two full-time faculty members which have contributed to the growing trend of efficiency regarding SCH/FTEF. As the program continues to grow additional faculty will be necessary, and will also help make the department more resilient. Additional faculty would also help generate more extramural funding, both in research and in contract work.

**6. Duplication and Distinctiveness (1750 characters or less)**

I concur with the program's description that PM offers a unique program in the State of Alaska.

**7. Strengths and Ideas for Moving Forward (1750 characters or less)**

I concur with the strengths laid out by the program and would like to explore the idea of a BS PM program and reinforce pathways from other baccalaureate programs to the accelerated MSPM.

**Dean's Final Evaluation**

**I commend the program for: (number and list the specific commendations in the narrative box, 1500 character limit)**

I commend the program for taking multiple actions to successfully increase enrollment. The PM program stands as an excellent model for others to follow. Students have demonstrated PM success upon graduation and the successful PMI-GAC reaccreditation reaffirms the great work by PM faculty and staff.

**I recommend that the program: (number and list the specific recommendations in the narrative box, 1500 character limit)**

**Dean's overall recommendation to the provost:** Continuation -- Program is successfully serving its students and meeting its mission and goals. No immediate changes necessary, other than regular, ongoing program improvements.

**If an Interim Progress Report is proposed, recommended year:** N/A

**If a Follow-up Program Review is proposed, recommended year:** N/A

**Proposed next regular Program Review:** AY2029

*After completing the Dean Section above, sign, date, and email this form to the committee, and to [uaa.ooo@alaska.edu](mailto:uaa.ooo@alaska.edu). If the program is fully delivered on a community campus, copy the appropriate community campus director(s). The program has one week to provide an optional response to the Dean Section using the Program Optional Response section below.*

**Dean's signature:**



**Date:** 4/5/2022

END OF DEAN SECTION

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**PROGRAM OPTIONAL RESPONSE (Due within one week of receiving dean's review)**

*Programs have the option to submit to the provost a response to the dean's evaluation within one week of receiving the dean's review, using the narrative box below.*

*Optional responses should be submitted to [uaa.ooo@alaska.edu](mailto:uaa.ooo@alaska.edu), with a copy to the dean. If the program is fully delivered on a community campus, copy the appropriate community campus director(s) as well.*

**Optional Response: (10,000 characters or less)**

The Program concurs with Dean Mock's findings and appreciates the support provided. We will continue to execute programs to increase enrollments, provide enhanced educational pathways for students in collaboration with other UAA programs, and innovate the instructional environment and curriculum to meet students' career goals and industry needs.

**Program Signature:**



**Date:** 4/5/2022

END OF PROGRAM OPTIONAL RESPONSE SECTION

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**PROVOST SECTION (Due on August 1)**

*After completing, signing, and dating the Provost Section of this form, email the completed form to the program review committee and dean, with a copy to [uaa.oaa@alaska.edu](mailto:uaa.oaa@alaska.edu) for posting. If the program is delivered on a community campus, copy the appropriate community campus director(s) as well.*

**Provost's commendations, additional or adjusted recommendations, if any, and other general comments (3000 characters or less):**

I agree with the dean's commendations and recognize the faculty's considerable efforts to be proactive and action-oriented in addressing the current recommendations. I ask the faculty to continue to help the institution think broadly about what it means to put students first at the graduate level. Of particular note is the program's reach back effort, to support former students to return and complete the degree. Please consider how the program can continue to build on its efforts and use what it has learned through this Program Review process to further reflect on the program, its curricular design, how each course is delivered, and how its students are supported.

While the dean did not list any recommendations, I have the following requests.

- I request that the program use the next year to review the degree's total credits and explore if the total needs to exceed the Board of Regents minimum. At the end of the year, the faculty should report to the dean on progress toward reducing the total credits to the Board minimum.
- The program is well-positioned to meet state needs, particularly in terms of infrastructure. I request that the program proactively keep up with the developing infrastructure bill and move to address the related state needs.
- Finally, there is a clear and obvious state need for more undergraduate education in this area. I request that the program consider moving forward with an undergraduate option, and I will support this as a path to having another full-time faculty member.

**Final decision:** Agree with the dean's overall recommendation with the additional guidance and adjustments as per the above comments.

Provost's signature: 

**Date:** 4/27/2022