

**Docket Item:**

Community College Approval: Klamath Community College, Associate of Applied Science in Aviation - Helicopter, within 49.0102 - Airline/Commercial/Professional Pilot and Flight Crew.

**Summary:**

Klamath Community College proposes a new AAS degree in Aviation - Helicopter. Higher Education Coordinating Commission (HECC) staff completed a review of the proposed program. After analysis, HECC staff recommends approval of the degree as proposed.

**Staff Recommendation:**

The HECC recommends the adoption of the following resolution:  
RESOLVED, that the Higher Education Coordinating Commission approve the following degree: AAS in Aviation - Helicopter.

## **Klamath Community College seeks the Oregon Higher Education Coordinating Commission's approval to offer an instructional program leading to a degree in Aviation - Helicopter.**

### **Program Summary**

AAS Aviation Science Helicopter program trains students to work as professional pilots in either the air transportation industry or commercial helicopter industry. Career paths with this degree include the following: commercial pilot, pilot for a private corporation, charter pilot, and flight instructor to new student pilots. The AAS Aviation Science Helicopter degree program is designed to produce high-quality graduates who are prepared to enter the field as aviation pilots. This field offers high-wage careers that are global in scope. The AAS Aviation Science Helicopter degree provides students with the mandatory flight hours along with industry-specified instruction. Instruction takes place in a one-to-one student-to-instructor learning environment to ensure that students acquire the academic knowledge necessary to be a safe pilot and to pass the FAA knowledge exams. Federal Aviation Regulations 14 CFR parts 61 and 141 set forth the qualifications, testing, and certification requirements for pilots, flight instructors, and ground instructors.

#### **1. *Describe the need for this program by providing clear evidence.***

- Employment statistics pertaining to 10 year growth rate in region 11 indicate that by 2024 the needed number of qualified certified flight instructors with instrument helicopter pilots will increase to 50% and on a state level it will be 27.5%.
- Pertaining to occupational percentiles, individuals who possess this degree could make region 11 median income or make upwards to \$250,000 a year flying commercial helicopters.
- Aviation employers expect employees to possess these industry skills and knowledge that only an AAS degree can lend them.
- Klamath Community College's AAS in Aviation Science will be a training hub for high quality multiple offerings and expansion in aviation.
- The closest local aviation training provider is over 144 miles away.
- Available employment stats point out that professional helicopter pilots are key to our nation's security, strategic transportation requirements, environmental studies, and the need for highly qualified individuals to keep our infrastructure thriving and moving. Oregon Employment Department stats indicate that in 2014 Oregon had over 1,200 openings for employment. There was over 100,000 job openings nationwide. It must be stated that this degree prepares students for a global career and current stats worldwide are still being processed.
- Employment stats and region 11 indicate that by 2024 there will be a 50% growth rate and a 27.5% growth rate in the state of Oregon. Both of those percentages are higher than the 21% projected growth rate nationally.
- National statistics have shown that this degree prepares students for a career that is nontraditional by gender. Currently 95.5% of the positions held are dominated by males. Upon approval of this degree, Klamath Community College will be launching its fourth nontraditional by gender degree. This continues to be a positive trend taking place in region 11.
- After extended interaction with industry leaders, workforce professionals, secondary education representatives, and potential and current students, it has become obvious that a genuine opportunity exists to expand Klamath Community College's CTE program offerings. Such expansion is necessary to increase the options for nontraditional occupation seekers looking for advanced training and education in a highly sought after profession. The AAS degree in Aviation Science Professional Helicopter Pilot will produce qualified workers for the industry and meet the demands of future industry trends. It will provide a formal program to those that desire to enter the aviation industry as pilots, with strong foundations and knowledge in aviation science. The partnership between Klamath Community College and Precision Aviation has and will create excitement in the southern Oregon region for new advanced classes for those who desire to gain pilot certifications. This partnership also will foster and promote support of a growing base of aviation activities in the northwest.

2. ***Does the community college utilize systemic methods for meaningful and ongoing involvement of the appropriate constituencies?***

- Partnership with industry leader, Precision Aviation.
- Workforce partners have been instrumental in the design and development of the proposed AAS in Aviation Science program “professional Helicopter pilot.”
- Workforce partners have influenced curriculum development, training certificates, and have provided letters of support, plus meeting minutes in regional meeting times.
- Secondary school administrators are involved by allowing students to participate in industry days that have showcased all CTE programs including the proposed aviation science programs.
- Klamath Community College will work collectively to recruit and retain females into the program.
- Klamath Community College will also promote a supportive environment for minority students, Veteran students, students with disabilities, and ELL/LEP students within the program.
- The program has been developed through collaboration with business, industry and workforce partners, and educational partners. Key constituents are local and regional employers, airport administrators, and state workforce administrators.
- Individual business leaders have had informal meetings and correspondence with Klamath Community College for over a full year. Workforce partners have been instrumental in the design and development of the proposed AAS in Aviation Science program through shared industry experience and best practices. Klamath Community College’s workforce partners will assist in instructor evaluations to ensure ongoing industry relevant improvements.
- Local workforce partners include the Small Business Development Center, Chamber of Commerce, Oregon Employment Department, South Central Oregon Economic Development District, Central Oregon Intergovernmental Council, Region 11 Regional Workforce Investment Board and the Oregon Department of Veterans Affairs, Klamath airport administration, and the local National Guard. Workforce partners have influenced curriculum development, training certificates, and have provided letters of support, plus meeting minutes in regional meeting times.
- Klamath Community College’s partnering agency, Precision Aviation, is a certified part 141 training agent.

3. ***Is the community college program aligned with appropriate education, workforce development, and economic development programs?***

- Graduates of the AAS Aviation Science Commercial Helicopter Pilot degree are set up to gain the skills necessary to successfully become helicopter pilots, copilots, commercial pilots, and flight instructors.
- One of the key indicators Klamath Community College and its workforce partners have recognized in the aviation industry is a 10 year growth projection with some career clusters as high as 27.5%.
- The program is designed for students to receive industry recognized certificates throughout their two-year commitment. The certificates will consist of professional pilot ground school instrument in commercial flight, certified flight instructors, and certified flight instructor with instrument.
- Contextual learning labs and flexible classroom delivery with modular focus of industry skills and knowledge is a cornerstone of this program’s proficiencies.
- Klamath Community College believes that an AAS degree in Aviation Science fits perfectly into the states 40-40-20 goals. A degree in aviation science also could be a foundational degree with transferability into Oregon Institute of Technology’s aeronautics program.

Klamath Community College’s AAS degree in Aviation Science Commercial Helicopter Pilot program has been built with a Pathway Certificate model in mind. Embedded into every second term is an industry recognized certificate that possesses industry recognized proficiencies. As

expansion of Klamath Community College's Aviation Science degree takes hold, connections with secondary CTE programs will be sought. Preliminary conversations have already taken place with Oregon Institute of Technology. These conversations have stemmed around transferability into multiple degree options.

The AAS degree in Aviation Science is designed to capture the traditional student, displaced worker, and veterans. Graduates of the AAS degree in Aviation Science Commercial Helicopter Pilot program will have the necessary skills to become flight instructors and commercial pilots. The AAS degree in Aviation Science airplane is aligned with Federal Aviation Regulations 14 CFR parts 61 and 141 which set forth qualifications, testing, and certificate requirements. Students will be required to be proficient and pass FAA flight evaluations throughout their entire degree. These proficiencies will lend themselves to direct employment into the global aviation market.

4. ***Does the community college program lead to student achievement of academic and technical knowledge, skills, and related proficiencies?***

- Students will receive multiple industry relevant certificates throughout their AAS degree.
- Students will become certified flight instructors with instruments.
- Students will receive professional ground and private pilot licenses.
- Program outcomes are clearly identified and each outcome is connected to industry relevant FAA proficiencies.
- A majority of the labs are designed to be working within a one-to-one ratio student to instructor.

The AAS Aviation Science Helicopter degree is designed to produce high-quality graduates prepared to enter the field of aviation pilots. This field is an excellent high wage career that is global in scope. Klamath Community College's workforce partner, Precision Aviation, is a well-established local company offering numerous local industry contracts, federal approval, and a curriculum that enables students to begin working in the industry upon graduation.

The AAS Aviation Science Helicopter degree provides students with the mandatory flight hours along with industry specified instruction. This degree provides students with the knowledge, skills, and training necessary for them to achieve helicopter certification through to certified flight instructor with instrument. Instruction is designed to place students in a learning environment where the majority of the lab instruction will be a one-to-one ratio of student to instructor. This instruction style ensures that students will receive academic knowledge necessary to be a safe pilot and pass the FAA knowledge exams. Federal Aviation Regulations 14 CFR parts 61 and 141 set forth the qualifications, testing, and certification requirements for pilots, flight instructors, and ground instructors.

Students are required to take a placement test to determine their academic level and readiness to enter the program; some exceptions may be made for short-term certificates. General education prerequisites of Math 70 and Writing 121 will be assessed in this placement test. The AAS Aviation Science program will accommodate students with special needs to the degree appropriate to the physical ability of the participant and within the constraints of proper industry standards and safe professional practice.

5. ***Does the community college identify and have the resources to develop, implement, and sustain the program?***

- Partnership with Precision Aviation.
- Partnership with a woman owned small business company that is an industry leading training provider that was established in 1983.
- Workforce partner has the ability to train under both part 61 and part 141 regulations.
- Workforce partner is part 133/135/141/145 certified.
- Students will receive flight simulation to maximize skill building.
- Workforce partner is a proved laser grade testing center for all FAA written knowledge tests.

- Workforce partner has FAA designated examiners on staff.
- Workforce partner has multiple aircraft in its fleet ranging from but not limited to Sikorsky S-61s, Sikorsky S300c, MD 500s, Bell 206, Schweizer 300s, and Guimbal Cabri G2.

Klamath Community College is a well-established community college for over 17 years. Klamath Community College (KCC) is accredited through the Northwest Commission of Colleges and Universities (NWCCU). Klamath Community College has an approximate \$11 million annual operating budget. Klamath Community College provides accessible quality education and service in response to the diverse needs of their students, business partners, and community. The College supports student success in workforce training, academic transfer, and foundational skills development.

Klamath Community College will be partnering with Precision Aviation to deliver this AAS degree in Aviation Science Helicopter. Precision Aviation was established in 1983. Over the last 30 years, Precision Aviation has become a respected aviation training, maintenance, and operating company providing an array of services to both the private and public sectors, including many United States and foreign agencies. Precision Aviation activities span from local operations to international missions. Precision Aviation was one of the first all-inclusive Part 141 Aviation Training Schools in the western United States and they also hold Part 133, 135 and 137 Certificates. Precision Aviation's goal has always been to provide safe, comprehensive aviation training to those who want the highest quality and the best value. Precision Aviation is a FAA Approved Flight School offering approved courses from initial pilot certification through instructor pilot with instrument.

Students taking their general education requirements will be assigned to classes that are online or in person. Aviation students will be side-by-side with all KCC students as it pertains to their general education classes. Sixty percent of the aviation classes will be conducted with a one-on-one student to instructor ratio and fees have been set to account for the flight time and simulator costs, including fuel during the labs.

Precision Aviation will provide aircraft for the purpose of flight training which are maintained in a consistently and airworthy condition by the repair station certified under Part 145 of Federal Aviation Regulation. They are also responsible for continued maintenance and repair of any damaged aircrafts and all repairs will be accomplished in accordance with applicable Federal Aviation Regulations. Precision Aviation will also be providing flight training simulator time as part of the ongoing instruction.

Joint participation agreements between Klamath Community College and Precision Aviation have detailed ongoing improvements and sustainable pricing models.

### **Assurances**

Klamath Community College has met or will meet the four institutional assurances required for program application.

1. *Access.* The college and program will affirmatively provide access, accommodations, flexibility, and additional/supplemental services for special populations and protected classes of students.
2. *Continuous Improvement.* The college has assessment, evaluation, feedback, and continuous improvement processes or systems in place. For the proposed program, there will be opportunities for input from and concerning the instructor(s), students, employers, and other partners/stakeholders. Program need and labor market information will be periodically re-evaluated and changes will be requested as needed.
3. *Adverse impact and detrimental duplication.* The college will follow all current laws, rules, and procedures and has made good faith efforts to avoid or resolve adverse *intersegmental* and *intra-segmental* impact and detrimental duplication problems with other relevant programs or institutions.
4. *Program records maintenance and congruence.* The college acknowledges that the records concerning the program title, curriculum, CIP code, credit hours, etc. maintained by the Office are the official records and it is the college's responsibility to keep their records aligned with those of the Office. The college will not make changes to the program without informing and/or receiving approval from the Office.