

EQUIPMENT NEEDS ASSESSMENT APPLICATION
Fall 2017

Name of Person Submitting Request:	Tarif Halabi
Program or Service Area:	Aeronautics
Division:	Applied Technology, Trans. & Culinary Arts
Date of Last Program Efficacy:	
What rating was given?	Conditional
Equipment Requested	Magneto Tester, Digital Meters, Vid-Mar Cabinets ,A65 Test Stand
Amount Requested:	\$28,500
Strategic Initiatives Addressed: Strategic Directions + Goals	3.2,6.1

NOTE: To facilitate ranking by the committee, submit separate requests for each item; however, multiple items can be submitted as one request if it is required that the equipment is packaged together.

Replacement X Additional X

Are there alternative funding sources? (for example, Department, Budget, Perkins, Grants, etc.)

Yes X NO

If yes, what are they? Perkins/Ramp-up

1. Provide a rationale for your request. (Explain, in detail, the need for this position.)

The Aeronautics Program offers the Airframe and Powerplant (A&P Technician that prepares students for employment in the aviation Maintenance industry. The program also prepares our students to take and successfully pass The Federal Aviation Administration’s (FAA) Airframe & Powerplant Mechanic examination. The program is highly regulated by the FAA. In order to provide the students the skills and competences they need to pass the FAA test and compete for jobs in the aviation field, existing outdated equipment and tools in the Aero laboratory must be upgraded.

- The upgrades would be for a new Magneto Tester the current one is over 50 years old and quickly becoming a safety issue. The department can’t afford to have this tester fail because part of the students FAA test requires them to time magnetos with tester.
- Fluke 87 digital multi-meters are required to replace outdated meters currently in stock. Modern aircraft rely heavily on electronics more so than any time in the past. The new meters would place relevant industry meters in the hands of the students and help them better trouble-shot repair and inspect aircraft electrical and electronic systems
- Four Vid-Mar cabinets are required for the tool room to store required hardware and tools for the aeronautics students. This cabinets are industry grade and are relevant to keep hardware and tools organized. Past visits from the FAA Inspectors have brought to our attention the dis-organization of our hardware and tools. Out in the industry organization of aviation hardware and tools is top priority for the FAA and aircraft operators. We currently have old wooden shelves that are overload.

****The current shelves are quickly becoming a safety issue.

- A-65 test stand for engine runs after re-building it .The power plant program runs 5 to 7 engines. The department has only one Test Stand for the A-65 engine. This has proven to be frustrating to the students, as they have to wait up to 4 weeks to run and test their engine. In the mean time they lose continuity with what they have learned. An additional test stand would help alleviate this problem.

2. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

To support the goals of the department, updating the instructional technology and its curriculum will help towards learning needs of the student to pass the FAA Written, Practical and oral portions of the FAA test. We have increased our relationship with industry and employee partners through advisory board meetings ,in which they have conveyed their concerns of graduates being trained on relevant equipment. As well we are upgrading our method of tracking local employer’s needs. All the preceding will enhance student success rates and increase program effectiveness as well as enrollment.

The following are extracted from 2016-2017 EMP, this reflects continued budget support for the Aeronautics Program.

- Student Success has increased to 82%, a high for the last four reporting periods
- FTES increased 7.5% from last year 2015-2016 although still higher than the previous 2 periods the increase in this current period is a positive step forward for the program.
- FTEF is at 5.98 which is an overall increase over the last 3 periods.

3. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, planning, etc.*).

- New practical portion of the FAA exam, which was updated on November 1 of 2015.(14 CFR 183.25) Which requires newer updated troubleshooting standards.
- Industry employer’s request relevant training (ref. 09-22-16 aeronautics advisory meeting minutes)

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4. Indicate any related costs (including any ongoing maintenance or updates) and department/program’s plans to support those costs.

- The estimated cost for the Magneto Tester is \$4,000 no further maintenance cost is needed after the initial purchase.
- The digital Meters would require no further costs after purchase.
- Vid-Mar cabinets are a onetime cost.
- Engine test stand is a onetime cost.

5. What are the consequences of not funding this equipment?

A few of the consequences of not funding this requests includes,

- Students not being prepared for the FAA mandated testing
- Students lacking skills which employers' require of our graduates.
- Students unable to compete with other students who have acquired the same knowledge but were exposed to using updated aviation equipment.
- *Safety*