

Adv Tech 2011-12

Electronic Technology - #1 - Electric Motor and Motor Controls Trainer Purchase

Summary:

The purchase of electric motor and motor controls trainers are required to facilitate new classes added to the Electronics Technology Program.

Description

With the addition of Motors 1 (ET229) and Motors 2 (ET241) to the Electronic Technology program additional laboratory trainers are required to provide the “hands on” training that is critical to student preparation. For a lab class of 16 students, 8 stations are required to give all students the time to personally engage in hands on learning. Laboratory training is a cornerstone of the curriculum in Electronic Technology and is provided in every class offered by the department. Motors 1 (ET229) and Motors 2 (ET241) are required classes for Electronic Technology and Apprenticeship students.

Increased student attendance and the inclusion of Apprenticeship students into the ET department have created a need for additional lab equipment. Advances in motor control technology have rendered what little equipment we have obsolete. Modern motor and motor control trainers will ensure the students get experience working with equipment they will face in the field.

Questions and Answers

How is the initiative linked to the Unit Plans most recently submitted?

- 1. How does it continue the achievement of those goals?**
- 2. If this is a continuation of an initiative started last year, make sure that relationship is clear.**

How is this initiative linked to the efficiencies and productivities plans you had last year?

- 1. How does it continue the achievement of these plans?**
- 2. If this is a continuation of an efficiency or productivity plan started last year, make sure that relationship is clear.**

The purchase of this equipment is in line with the priority #1 goal of preparing the student to work with modern equipment. Equipping the lab with industry standard equipment ensures that the lab portion of the curriculum is in line with the modern principles, concepts, and devices used in the lecture portion.

The addition of these training stations keeps the class relevant to students in the ET program and the Apprentices. As long as the new equipment can serve multiple groups, the classes will maintain a larger enrollment and, consequently, a higher efficiency.

Our program recognizes that the apprenticeship groups will take classes through the Electronic Technology program as long as we maintain relevance and affordability. This initiative is designed to address the ‘relevance’ aspect of this formula. This equipment will benefit the students by training them with technologies that are current to common industrial standards. The community recognizes this quality and increases our odds of making us their choice as a training facility. The Electronic Technician program, outside of recent enrollment anomalies, has been a program with declining enrollment. The long term strategy is to combine some ET classes with other campus groups such as apprenticeship. Keeping our class relevant to multiple groups is essential to this goal and this initiative addresses that aspect of the plan.

Describe the resources needed:

8 training stations: \$44,000

What specific measurable program outcomes do you expect to achieve with this initiative? The outcomes should be specific enough to be measurable. Also, outline the method that will be used to determine the results.

Students will demonstrate competence in the use of this lab equipment. Outcomes are measurable through graded assignments.

Department Priority:

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Unit Resources:

There are no unit resources available. Two program classes will be designed to use this equipment. Division and program budgets will support the incorporation of this equipment and hardware to existing classes.

Funding Request: Carl Perkins

Is this a Career & Technical Education program approved by the state and offered through Lane for credit?

Yes

If not a Career & Technical Education program, does your request provide considerable support for students enrolled in these programs?

Yes

Do you have an advisory committee that meets 2-3 times per year?

Yes

If request is for personnel, will funds be used to replace an existing position?

How will funding this initiative increase or sustain the academic achievement and technical skills attainment (GPA of 2.0 or better) of Career and Technical Education students?

By keeping the hardware and software current with industrial trends, students become more engaged with the classes. New equipment is challenging and exciting! Students recognize the importance of the class when the training is relevant.

How will funding this initiative increase or sustain the number of CTE students that graduate or receive a one year certificate from Lane and help prepare the students for employment?

By training on equipment that is current to industrial standards, the students' employability will increase. In order for our students to be hired, it is essential that this program keeps up with the hardware and software that is being used by our local technical community.

EQUIPMENT \$

43640

COMPUTER HARDWARE \$

COMPUTER SOFTWARE \$

MATERIALS & SUPPLIES \$

360

CURRICULUM DEVELOPMENT (Hours)

70

PART-TIME FACULTY \$

TIMESHEET STAFF \$

TRAVEL \$

Can this initiative be partially funded?

No

EQUIPMENT \$

(E) Explanation of effect of partial funding:

COMPUTER HARDWARE \$

(CH) Explanation of effect of partial funding:

COMPUTER SOFTWARE \$

(CS) Explanation of effect of partial funding:

MATERIALS & SUPPLIES \$

(MS) Explanation of effect of partial funding:

CURRICULUM DEVELOPMENT (HOURS)

(CD) Explanation of effect of partial funding:

PART-TIME FACULTY \$

(PF) Explanation of effect of partial funding:

TIMESHEET STAFF \$

(TS) Explanation of effect of partial funding:

TRAVEL \$

(T) Explanation of effect of partial funding:

Funding Request: Curriculum Development

Funding Request: Technology Fee

1. Category of request

- **Maintain existing technology**
- **Increase student access to technology**
- **New technology**

Please type in the category of the request in the field below.

Increase student access to technology

2. Campus location

- **Main Campus**
- **Downtown Center**
- **Florence**
- **Cottage Grove**
- **CLC (list specific locations)**

Please type in the location of the request in the field below.

Main Campus

3. Names of the person(s) with more information (if needed):

Terry Dale

4a. Budget ORGN

611705

4b. Budget PROG

112000

5. How many students will benefit per year?

72 students

6. Describe the benefit?

Providing industry standard equipment in the lab gives the student great benefit in providing hands on training with the equipment they are expected to know upon completion of their training.

COMPUTER HARDWARE \$

44000

COMPUTER SOFTWARE \$

STAFFING \$

INSTALLATION \$

LICENSING \$

Can this initiative be partially funded?

No

COMPUTER HARDWARE \$

(CH) Explanation of effect of partial funding:

COMPUTER SOFTWARE \$

(CS) Explanation of effect of partial funding:

STAFFING \$

(S) Explanation of effect of partial funding:

INSTALLATION \$

(I) Explanation of effect of partial funding:

LICENSING \$

(L) Explanation of effect of partial funding: