Goal Progress Report - Four Columns

Long Beach City College

Dept - Electronics/Electricity

Mission: The mission of the Electrical Department is to educate its students in all areas of Industrial Electrical Technology in response to the needs of industry and industry driven standards. Included in these industry driven needs are Solar Electrical, Power Generation, Construction, Maintenance, Automation, Networking Systems and Robotics.

Description: The Electrical Department offers a 45 unit certificate and degree program in Industrial Electricity. Areas of specialization include, Traffic Signal Technician, Construction Management, Automation Technician, Robotics Technology, Alternative Energy, Motor Drive Systems, Low Voltage Wiring and CISCO Networking System.

Internal Conditions (see Help for list): The department plan to expand our course offerings in Green Technology is supported by the goal adding additional solar technology classes ELECT 262 & 263

External Condition- School of Trades Advisory Committee Meeting

Advisory Committee Input: Break Out Session Notes
Electrical Department
April 30th, 2010
Faculty Present (Electrical): Scott Fraser, Jessica Losch, Christine Stewart, Suzanne Acone. (Other): Gail Schwandener (Dean of Workforce Development).
Industry Representation Present: Dave Cooper Toyota, additional comments received from John Young, Total Western and Frank Klein, Oceaneering.
Others Present: Note taker, Financial Group Representative (just sitting in).
Needs:

1. Multi-task technician.
2. Relative and accessible training to bring motivated and trainable employees up to the quality and needs of Toyota?s manufacturing (They need people that have the skills to minimize their down time.),
3. Classes in electrical, mechanical, instrumentation, pneumatics, hydraulics and process controls.
4. Prefers to work with the community college for employee training.

Toyota is a company that does not quickly lay off or let go of employees. They are union and in some cases can not readily lay an employee off that is not performing or able to do the job assigned. To overcome these situations Toyota invests in their employees in the form of training/retraining or moves them around to a job they can perform. Today Dave is here to find sources of training that will fulfill their needs.

Toyota needs class times and locations that are conducive to their employees work schedule. Suggested all day classes once a week.

There was talk about how to fill classes. City College needs minimum 20 students. Suggestion was made to canvas a 10 mile radius (from the campus) to find other industries that might need the same training to get the minimum class size. The Center of Excellence already has something similar set up. By way of market research. We talked about working together to accomplish the goal of finding similar needs of industry (in order to fill classes) and getting employees trained.

We did not have a good turnout of industry partners. Many invitees had commitments (prior, last minute meetings, deliveries, emergencies, etc.) that prohibited them from attending. Experience shows that industry partners and potential partners do not have the flexibility to make a set day to meet. Our department is active in accommodating the employer and meeting them at their convenience. To see the value in both approaches would best serve our goal of having a well trained qualified workforce.

	Out of meeting requests from John Young of Total Western, include the request for instrumentation classes. His company services the local refineries and instrumentation technicians are in high demand. Absent a pool of instrument techs, they would like to start an instrumentation training program. They would also be willing to work with LBCC to locate a suitable instructor and in the development of the lab. An additional meeting with Frank Klein of Oceaneering, affirmed their need and support for an electro-hydraulic class as part of our program. This need aligns perfectly with that of Toyota.
External Condition-Community Outreach/Partnership:	As a college partner with the Marine Advanced Technical Education (MATE) Center in Monterey CA, the department is actively involved with middle school and high school outreach in the form of underwater robotics training and competition. This department hosts the annual underwater robotics regional competition each year in May.
External Conditions- Other :	The departments regional area keeps expanding with the demand for our students. Locations hiring our students include the off-shore underwater robotics industry (world wide), automotive manufacturing (nationwide), power distribution (nationwide). Companies seek out LBCC electrical students because of our program content and the reputation our students have developed for us.
Faculty & Staff :	The department is composed of five full time faculty,16 adjunct faculty and two Instructional Assistants (one full time, one 50%). One full time faculty member is on 60% release time outside of the department
Names & Titles of Program Review Participants:	Scott Fraser, Dept. Chair John Hauck, Instructor Matt Turlo, Instructor Lynn Shaw, Professor Suzanne Acone, Instructor
2009-2010 Accomplishments:	In the 2009-2010 year the Electrical Department accomplished the following. 1. Completed the hiring of the department's fifth full time instructor. 2. Developed the hand's-on portions on the Solar Technology Classes 3. Delivered grant funded solar training classes to help develop the solar classes 4. Purchased of solar training material and storage units for the material. The storage units are located on the west side of the B building. 5. Provided training in underwater robotics to teachers from five LBUSD middle schools 6. Hosted the underwater robotics regional competition for middle and high schools. 7. The underwater robotics team from our department placed 2nd overall in the international underwater robotics competition against major universities and marine institutes from all over the world. 2nd place was to the Russian Marine Institute by less than 10 points out of 500 possible.
2010-2011 Accomplishments:	In the 2010-2011 year the Electrical Department accomplished the following. 1. Continued the tenure process for the department's fifth full time instructor. 2. Started offering the solar classes as for credit classes (ELECT 261) 3. Integrated the solar training material into ELECT 261 & 262 4. Purchased of solar training material through the VTEA grant process. 5. Provided training in underwater robotics to teachers from seven LBUSD middle schools. 6. Hosted the underwater robotics regional competition for middle and high schools. 7. Continued our success in having students placed in high level technology jobs both on-shore and off-shore. Students were hired by Louisiana State University, Woods Hole Oceanographic Institute and MillenWorks (robotics).

Goals	Request & Justification / Resources Needed	Goal Progress	Strategies Implemented & Follow-Up

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Dept - Electronics/Electricity - Solar Program Development - Continued expansion of the solar/green classes, ELECT 261, 262 & 263 Offer ELECT 262 in Fall 2011 and 263 in Spring 2012 **Year(s):** 2009 - 2010 2010 - 2011 2011 - 2012 **Start Date:** 09/01/2009 **Goal Status:** In Progress **Goal Priority:** High **Rationale:** Development is driven by industry and market conditions **Strategies:** Complete class outlines Develop teaching area **Responsible Parties:** Matt Turlo **Campus supported by this goal:** LAC **Specify if goal is for department or sub-area:** Department/ Program **Level of Support Needed:** Department	**Resources Needed Name:** Solar Learning Lab **Resources Needed Description:** Combination of solar panels, inverters and infrastructure to support the hands on portion of the solar/green classes **Inter-Level/ VP Level Group Decision:** Pending **Fiscal Year:** 2010 - 2011 **Duration:** One-time **Estimated Cost:** 125000.0000 **Type of Resource Requested:** 640000 - Equipment **Department Code:** 093200 Electricity	11/01/2011 - Additional lab equipment is being purchased Fall 2011 through the VTEA grant process and will be implemented in the curriculum Spring 2012 **N/A:** N/A **Next Step:** Continue Working on Goal	
		10/01/2010 - ELECT 262 and 263 have been completed and have been submitted to the Curriculum Committee for review and approval **N/A:** N/A **Next Step:** Continue Working on Goal **Data to Support Goal Progress:** Minutes of the curriculum committee will verify submission. **Data Reported for Year:** 2	11/01/2011 - ELECT 262 AND 263 have been approved. ELECT 262 was first offered Fall 2011 and will be offered again in Spring 2012. There has been two storage units sited on the west side of the B Building to support this class and the lab equipment. Additional equipment has been ordered as part of the VTEA process and will be incorporated into the class during the Spring 2012 semester.
Dept - Electronics/Electricity - ElectroMechanical Classes - Continued program expansion and the development of a class to support Hydraulic and Pneumatic Control systems in response to industry needs	**Resources Needed Name:** Hydraulic and Pneumatic Lab equipment **Resources Needed Description:** Equipment needed to implement 10 hydraulic and pneumatic stations **Inter-Level/ VP Level Group Decision:**	11/01/2011 - The department will be building one station out of department budget and donated components in order to determine the cost of building enough stations for the class. **N/A:** N/A	

Goals	Request & Justification / Resources Needed	Goal Progress	Strategies Implemented & Follow-Up
Year(s): 2009 - 2010 2010 - 2011 **Start Date:** 09/01/2009 **Goal Status:** In Progress **Goal Priority:** Medium **Rationale:** To respond to industry requests received by industry partners (advisory) Toyota and Oceaneering International. Recent (Fall 2011) meetings with Toyota and Oceaneering reaffirm the need for our students to develop the hydraulic and pneumatic control system competencies. **Strategies:** Develop Class Curriculum Develop Hardware test stations. **Responsible Parties:** Scott Fraser **Campus supported by this goal:** LAC **Specify if goal is for department or sub-area:** Associate's Degree **Level of Support Needed:** School or VP **Specify if goal is for department or program:** Department	Pending **Fiscal Year:** 2011 - 2012 **Duration:** One-time **Estimated Cost:** 75000.0000 **Type of Resource Requested:** 640000 - Equipment **Department Code:** 093200 Electricity	**Next Step:** Continue Working on Goal	
Dept - Electronics/Electricity - Instrumentation Class - Continued program expansion and the development of a class covering Instrumentation and Advanced PLC programming in response to industry demands	**Resources Needed Name:** Instrumentation Lab **Resources Needed Description:** Sensors and actuators needed to operate a sensor lab **Inter-Level/ VP Level Group Decision:** Pending		

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Year(s): 2010 - 2011 2011 - 2012 **Start Date:** 09/01/2009 **Goal Status:** In Progress **Goal Priority:** Medium **Rationale:** Respond to advisory panel's request for instrumentation classes and advanced PLC programming classes. The two requests work together. **Strategies:** Curriculum Development Hardware/Sensor & actuator procurement **Responsible Parties:** Scott Fraser **Campus supported by this goal:** LAC **Specify if goal is for department or sub-area:** Department/ Program **Level of Support Needed:** Department	**Fiscal Year:** 2011 - 2012 **Duration:** One-time **Estimated Cost:** 40000.0000 **Type of Resource Requested:** 640000 - Equipment **Justification for Resource Request:** In response to advisory board recommendations **Department Code:** 093200 Electricity	10/01/2010 - The implementation of this goal will be delayed due to the current budget constraints. **N/A:** N/A **Next Step:** Continue Working on Goal **Data to Support Goal Progress:** School of Trades Advisory Committee Meeting Break Out Session Notes Electrical Department April 30th, 2010 **Data Reported for Year:** 1	