**Agenda**

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<th>Welcome and Introductions</th>
<th>Discussion</th>
<th>Recommendations &amp; Action Items</th>
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<td>Jim Lancaster introduced himself as the new Dean of Career, Technical, and Continuing Education, that includes Fee-Based, Contract Education, Non-Credit, I.T., Tech Prep, Automotive Technology, Drafting, Architecture, Public Works, Water Technology, and Cosmetology. The Council introduced themselves. A sign-in sheet and hand-out materials was circulated.</td>
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| Announcements | This is the first Advisory Meeting for I.T. Jim explained the importance of the Advisory Council to all Community College Vocational and Career Technical Programs, and that it is required to have at least one meeting per year. |

**Attendees:**
- Terry Adams, Administrative Assistant – Citrus College
- Naomi Avila, Counselor – Citrus College
- John Bruestle, Trade & Industry Consultant - L.A. County ROP
- Leigh Buchwald, Instructor – Citrus College
- Don Davis, CIO – Azusa Pacific University
- Marti DeYoung, CTE Supervisor – Citrus College
- James Freibert, Account Executive – Ricoh Business Solutions
- Robert Gray, President – HDL Software
- Jim Lancaster, Dean of CTE – Citrus College
- Phil Parker, Sales Representative – Extreme Networks
- Joe Spereno, District Representative – NEC Unified Solutions
- Bruce Stoner, Instructor – Citrus College
- Jackson Tsao, Senior Account Executive - Lenovo
- Sarah Vielma, Business Consultant – L.A. County ROP
We look to the industry for input on current and future needs, which assists us to stay on track as a college in providing students quality programs that leads to employment: high-wage, high-skill or high-demand careers. Also Advisory contacts assist in keeping us informed of job availability within the industry. Importantly, applying for additional grant funding (Perkins, VTEA) for these programs requires having an Advisory Committee. The college goal is to follow the industry and meet the needs of the community.

Program Background

This program began several years ago with the former Dean, Jim Williams, and was not created with a career focus in mind. It was buried within Engineering making it difficult to find by students, counselors, and high school partners.

Department & Subject

The outdated Engineering Certificates were compared with the course work for the current I.T. Certificate.

Only three Certificates of Achievement have been awarded. The numbers need to be increased since the state looks at awarded certificates as core indicators. Poor scheduling and courses not being offered may have contributed to students not completing certificates.

Part of our goal today is to gather input from the industry on what we need, and then it is our job to figure out how to get there.
We are exploring what the industry needs from our college and the K-12 system, which we are currently developing in partnership and pathways either in students transferring or going straight into the work force.

Jim introduced Bruce Stoner (full-time Electronics & Engineering instructor) and Leigh Buchwald (part-time evening instructor) as the faculty in the I.T. Department. There is a need for additional faculty to help the Department grow.

Copies of the current curriculum were reviewed – three courses have to be rewritten to include outcomes. We would like to incorporate the Advisory suggestions in the rewritten courses.

I.T. does not have a separate budget but is shared with Engineering. We would like to eventually split I.T. as its own entity.

Background program data on I.T. and Engineering was distributed for discussion. The data included enrollment, classes, success rate (good), retention (return student, good), but there is considerable confusion with certificates. I.T. employment data is unclear because it is not separate from the Engineering Department data. Our student demographic population is largely Hispanic. The I.T. program is male-dominant and the state goal is for 25% or more non-traditional students (female). I.T. meets all three state goals of high-wage, high-skill, and high-demand.

Continual input from the industry

Need for additional faculty to help the Department grow

Faculty will rewrite courses for SLO’s and include Advisory suggestions and changes

Create I.T. cost center

Create new discipline to segregate data
<p>| Additional Background Data | With the use of grant money and our CTE Career Counselor, Naomi Avila, we can possibly help drive students into these areas as optional fields of study. Currently, Naomi is becoming more involved with the high schools and ROP through counseling students seeking enrollment into our programs. Sarah inquired about the status of our CSIS Program, and Jim explained that CSIS is housed under another Dean and is not considered to be vocational; therefore no certificates or Advisory Council has been created at this time. The CSIS is considered more of a Transfer Program. Currently the hardware is in one Division, and the software program is in another Division – combining the two is best and a desire of the V.P. of Instruction. Leigh Buchwald indicated that combining the two areas is optimum in teaching, i.e. hardware, security, server, network, A+, comp TIA exams. A revision in the Program structure is in process. The group agreed that striving towards this goal is important to an I.T. Program. State core indicators for I.T. were reviewed. These numbers are based on larger class sizes, whereas our lab capacity is only 25. Since I.T. has been buried under Engineering, we falsely do not have any data (less than 10 students). It is important to change how we identify our true I.T numbers. Due to the appearance of low numbers it is difficult to apply for funding. | The group agreed that striving towards this goal is important to an I.T. Program Ongoing process through Jim Lancaster |</p>
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<th>Two-Year Plan</th>
<th>Program Name</th>
<th>Areas of Concentration</th>
<th>Courses</th>
<th>Certificates</th>
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Labor Market Information is available on-line. Any time we apply for grants or create certificates it must be supported with labor market information. Unfortunately, the available information focuses on analysts or administrators and not adequate for our entry level occupations. But their outlook data is very useful in guiding us towards program development.

Marti defined the terminology and framework the state describes, and explained how Citrus College is developing pathways to high schools, and ROP's by aligning curriculum consistent with these pathways, life-long learning (credit through exam), and industry needs.

Jim reviewed other local community college catalogs (Rio Hondo, Mt. Sac, Chaffey) showing their I.T./Certificate Programs. If the certificate is locally approved, it does not appear on the transcript, and state approved will appear on the transcript. Citrus can do either.

Leigh and Bruce described the current course work required for the I.T. Program, which was followed by a discussion on the needs of the industry that will enable Citrus to create a plan.

Students are required to pass the Basic A+ Introductory course. Bruce would like to create a 6-week Certification Exam course. He also teaches Network Plus but explains to students that it is only a starting place.

**Ongoing Process**

**Marti DeYoung**

**Bruce Stoner will write a new Certification Exam course**
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<th>Certifications/ Skill Sets</th>
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<td>Leigh reported on the Evening Program – 3 courses taught, and for scheduling purposes ENGR 108 concentrates on Windows 2003, but will update to 2008. Virtualization is being introduced, and the class must be rewritten. Concentration is on Microsoft. Computer security is taught in ENGR 109, and offered concurrently but look to separate them in the future. We need additional adjunct instructors to expand the program and offer the same in the evening. Many of the students are those that work in the industry and look to expand their skills. Industry standards require coursework in A+ and in CompT for sales positions. NCSE certification required for most companies. No longer is the industry looking for computer techs, but prefer those that have strong general skills with an understanding of the networking, AV equipment, security and routing, back-up, storage systems, and RAID. Networking is becoming very important in the Performing Arts/Emerging Technologies. Leigh is working with Performing Arts to merge courses. Web training also becoming essential in the job market. Essential to creating excitement in the I.T. Program is teaching mobility. Programming is being taught in the CSIS Program which is in need of revamping. The Advisory suggested that ideally, CSIS and I.T. should be housed together. (Citrus needs to decide on what they want to provide the students, and then use this committee as a guide in reaching that goal.)</td>
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Jim defined a Student Learning Outcome as what does a student need to know and why. The important skill sets a student must learn that leads to employment include: Mac Certifications, A+ (minimum), CompT (all programs), regulatory compliance, MCSE, networking, AV systems, video, web, IP phones/networking, voice engineering, project management, software support, device integration systems, storage and back-up, and ethics.

All the certificates must lead to employment. What does the industry look for in hiring? As was discussed, they look for strong core technology courses, plus critical thinking, basic troubleshooting and diagnostic skills. Some current industry jobs include: hardware installer, AV technician, I.T. sales, field service technician, system administrators, server, network and communication specialist/technicians.

A discussion on which courses should be included in the I.T. Certificate. Physics should be removed, ethics and business courses are very important. The group concluded that a single core, broad range Information Technology Certificate is the best choice. Additional customized certificates can be offered with options of four or more different levels: Network Communications Servers & Security Media Support
**Meeting Adjourned**

Programming Systems

Virtualization is a large emerging technology, and should be taught with the server course. Eventually may become a specialized course.

The following are the current industry job titles:
- Network Technician
- Systems/Solution/Network/Server/Communication – Specialists
- Audio/Video/Music Specialists

After considerable discussion and according to industry standard, along with comparison to other colleges, the program identifier name should be *Information Technology* and the certificate name to read *Information Technology Network Communications.*

**Submitted by:**
Lois Bottari

| Virtualization pilot lab has been installed and will be used this summer - Leigh will keep us updated |

| The next I.T. Advisory Council will be held in October or November 2009 |