

## CADD/INDS Advisory Committee Minutes—November 14, 2003

### Members Present:

Larry Holmes	Raytheon
Dwight Saffel	CCCCD
David Zatoper	Corgan Associates
Kavitha Iyer	Corgan Associates
Ezra Pernermon	TI
Kenneth McVea	TI
Dick Thedford	Plano ISD
Phil Nguyen	Dallas Semiconductor
Jean Pinard	
Marietta Schell	CCCCD
Wayne Jones	CCCCD
Warner Richeson	CCCCD
Ann Beheler	CCCCD
Ali Kholdi	CCCCD
Larry Maughan	CCCCD

Warner Richeson opened the meeting and introduced new instructor, Ali Kholdi to the group. He spoke of Continuing Education and how there has been a little success there as well as a little failure. The Autocad Fundamental classes have made because the enrollment number doesn't need to be as high as credit classes. Architectural CADD classes have had zero enrollment so far so won't be offering it for a while. It's not as popular as the basic CADD.

The CADD area has tried to approach basic CADD, to tailor CADD classes to interior design class. Meeting with Ali Kholdi to come up with projects meaningful and that will dovetail into interior design program. North Texas students are being directed (by Sam Miranda) to CCCCCD to get their interior design classes.

The department is interlacing mechanical with architectural. Students are whizzing through the mechanical portion.

Larry Maughan asked whether this was in credit or continuing ed.

Warner replied it's mainly with credit right now, although it depends on the students. The instructors take note of who's in the class and what the student's interests are.

Warner mentioned the Spring/Summer schedule (which was attached to the agenda). Commented that Spring was set and summer was pretty well set. Asked the group to look over the schedule and see what might be missing.

## IC Program

Warner spoke of the Integrated Circuit program with the focus on concurrent enrollment. He's currently visiting with two school districts to plant the seed of the program and bring them up to speed on what the program is and try to get some concurrent students.

The students can fulfill high school and college credits at the same time, however the students would be required to come to a CCCCD campus. The courses won't be taught at the high schools. Warner discussed how difficult it has been to get these programs across to the schools.

Ezra Pernermon spoke of the NSF-funded grant and how several programs are grant funded. One effects integrated circuit layout. He's helping recruit support using IC as a model and hopefully it can be acclimated with other programs in the grant. It's a good way that industry could work with the college. There's a lot of discussion taking place.

Phil Nguyen asked if students could sign up for IC next semester.

Warner replied that they were pending agreement.

Ann Beheler added that it won't happen that fast, that this is a launch so the faculty can tell what IC layout actually is.

The two districts (Plano and McKinney) are in general agreement but Plano is suffering cuts. The earliest the program would take effect would be summer or fall.

Ezra mentioned the instructors teaching CADD in high school and the need to get them introduced to the IC layout.

Larry Maughan commented that he assumed this would be senior high school level rather than freshmen and sophomore.

Warner agreed.

Ezra added that administrators are very positive but there is still a lot of work to do.

Warner commented that this program had a lot of promise and should be a really good model for other programs.

## Enrollment

Warner discussed enrollment, stating that there had been an increase from previous semesters, both in CADD and interior design. The interior design program has blossomed and are currently looking for people to help teach.

Ali Kholdi spoke of creating an atmosphere that interior design needs to flourish. To get students engaged with the design philosophy. Trying to work on other courses to meet industrial requirements. The courses offered with architecture makes it practical to go with the goal we've established. Ali added that the department needs a new textile course instructor and asked that anyone who knows of one should let him know.

Ann added that there will be an ad in the Dallas Morning News.

### Co-Op

Warner asked Larry Maughan to talk about Co-op Education. Larry spoke of an educational program designed to help students apply what they're learning in class to the workforce, that they can take what is learned in the classroom and directly apply it to business. Larry spoke of a call he got from a CADD manager who was looking to hire a student. Larry has sent him six resumes (five current students and one recent graduate) and the man will begin interviewing within the next week.

Larry went over the steps it takes to get enrolled in co-op, including the eligibility requirements and gave everyone a handout (attached). He concluded by asking anyone with questions or comments to see him after the meeting.

Marietta Schell commented that she tells her students not to wait until the second year to start looking for jobs and encourages them to put a resume together as soon as possible. She has told them about co-op and will give them copies of Larry's handout.

Larry agreed and stressed the importance of starting the job search early, especially with the environment the way it is today. He added that he has helped alumni as well.

Dick Thedford commented that there are a lot of networking groups in the McKinney/Allen area for people who are out of work.

### Minutes from last meeting

Warner asked that someone volunteer to go over the minutes from the last meeting. Larry Holmes volunteered and asked everyone to read over the minutes and mention any corrections or changes. The group read over the minutes and approved them by unanimous vote.

### Subcommittees

Warner mentioned to the committee that they are covering a lot more territory than before and would like to divide the committee into three subcommittees, CADD; IC Layout; and Interior Design. Asked that each person let him know which committee they would like to be on.

## Comments

Larry Holmes asked whether the textbook he recommended would be used next semester and Warner agreed.

Ann Beheler asked the industry people to comment on what they see going on in industry.

Larry H. mentioned ASME Y14.41 and the fact that paperless drawing is not in the future, it's NOW. That drawing will be right on the model and the days of borders in mechanical drawing is limited.

Ken McVea spoke of modeling shops that have 3-D printing. Students can actually feel the model. The shops may be willing to work with us so students can actually show potential clients what they did in class. Ken spoke about a Rapid Prototype machine he could get at a discounted price. Ann asked him to get an estimated cost before June so she can fit it in the budget. Ken replied it would be between \$20,000-\$50,000. Ann felt this could probably be done.

Dick warned that there were environmental concerns that needed to be taken into consideration. The machines have lasers and liquid plastic, there's some waste that needs to be considered.

Ken said he would get more information.

Ann asked whether there was any other equipment needed.

Warner brought up drafting boards and the fact that the interior design department doesn't have any. Larry H. mentioned that the ones the department used to have were surplused when the department moved from McKinney. There wasn't enough room for both the boards and the computers. Warner said that Ann had managed to get some portable boards for the department for students who couldn't afford to pay for their own so they wouldn't be excluded from the classes.

Dick Thedford suggested industry could probably donate some old ones.

Ann said it might be possible to grab another room in the new building to put the tables in. Kavitha Iver agreed that drafting tables would be good to have because industry people still use them.

Phil asked about whether the school would get Cadence software. Ann asked him to put a proposal together. Phil mentioned it was \$5,000 a year to lease. Ezra mentioned that TI uses Cadence. Dick suggested Pro E, which gives 4 basic models: modeling; surfacing; drafting; and assembly.

Ann spoke of the big push toward blended learning and wondered whether if they could come up with coach software facilitated with instructor and has extra stuff the students

could read at home. She added we need to look for more convenient ways for students to learn, something other than 'seat time'.

Ann asked whether people were hiring.

Dick answered that things were starting to open up but that the companies are going to co-op programs and fellow employees to see if they know of anyone interested in working. They are getting away from advertising and Internet postings.

Larry M. said he's seeing people who've been laid off and are partnering with others who've been laid off to open their own businesses. They are hiring students for little pay until they can get up and running.

Dick said Nortel is hiring some but the jobs are going to people who've been laid off there in the past.

Marietta said Boeing is not advertising but are going through firms.

Kavitha said Corgan doesn't advertise, they use a lot of summer interns.

David Zatoper added that there's a tendency to recruit from universities for new hires. Now also recruiting through co-op. Entry level hiring is still flat and he sees that continuing through the next year. Stressed that a Master's degree is required now in architecture and required now for entry-level employees in his company. The summer interns they hire are working on their graduate degree so community college students wouldn't work out.

Dick asked David whether contract firms were producing the drawings his company comes up with and David said they are produced in the office.

Wayne Jones asked how comparable the transfer courses were. Kavitha said the first two years were basic courses. With architecture the student has to make the decision on their major by their junior year and have all the basic courses completed.

Wayne mentioned that the first two years of the engineering program included business courses and mechanical courses which are offered at CCCC.

David said the undergraduate degree has become more flexible with all solid engineering courses. Transfer students are still probably at least a semester behind. There is a merging trend toward architecture and visual design, even math majors and computer programming. It would be nice to work out programs with design studios related to the design area.

Warner said there were CADD classes taught at A & M that can be taught at CCCC. Ken added he knows two students driving from Denton to CCCC just to take AutoCad.

David said the State of Texas and the American Institute of Architects require continuing ed classes for architects to renew membership and to maintain their licenses. CCCCDD could easily tap into the instructors and advertise in journals. If CCCCDD offered a mid-mester course they could fill their classes. February is usually when things come up for renewal. This could be very valuable. Ann asked if he could help in this and David agreed adding the college would find a good market for continuing ed classes for architects.

Ken said manufacturing is off-shored but design work is still done here. David added that architecture is moving in a direction similar to accounting where there's a consolidation toward 10-20 global firms running a 24-hour organization. Production side of architecture will go to outsourcing in about 10 years.

Warner closed the meeting at 10:20am reminding everyone about subcommittees and that he'd be in touch.

The next meeting will be in the April timeframe.