

## ELECTRONICS TECHNOLOGY ADVISORY COMMITTEE MEETING

June 20, 1989

Members Present: John Bachler, Detroit Edison

Jerry Dywasuk, TRW Communications Group

Barbara Einhardt, OCC

Bill Lawrence, Omega Computer Centers

Robert Powell, OCC Dr. Bill Rose, OCC

Dr. Bill Rose welcomed the group and gave a brief overview of the Electronics Technology Program. He emphasized the importance of advisory committees to the technical programs of Oakland Community College and said that the Purposes and Functions of Advisory Committees, as established by OCC, would be provided to all members. (attachment)

Barbara Einhardt described the Electromechanical Engineering Technology Program which has been formulated at the request of General Motors Tech Center for its employees. A critical feature of this program is that the entire Associate Degree, with the exception of Physical Education, will transfer directly to Wayne State University. Students will receive a Bachelor of Science Degree in Electromechanical Engineering Technology from Wayne State. A similar program has been requested for employees at Milford Proving Ground.

Ms. Einhardt also described the new Plastics Technology Program being assembled with the assistance of Chrysler Motors. Students in the program will utilize the computer capabilities on the Auburn Hills Campus and the plastics laboratories of the various sponsoring industrial partners. Instruction will focus on the design of consumer/electronic/automotive parts (plastics and composites) with the utilization of computer software techniques.

Robert Powell, Department Chairman, spoke of the national trend toward declining enrollment in technical programs. In response to this trend, we are currently working with several area high schools toward integrating their curriculum with ours in such a way that their graduates can readily continue their studies in our Electronics Technology Program. Know as Tech Prep, this program will include a course in Principles of Technology offered on our campus and possibly also at Orchard Ridge. Students will take certain classes at their high school and, by passing a test, receive OCC credit for them. This articulation program will allow the College to have a direct influence on the level of instruction given at those schools to prepare students for their studies here.

Mr. Powell mentioned the need for our entire Electronics curriculum to be updated to match the new concepts in education. There is a need to incorporate Industrial Electrical courses in the Electronics Technology Program. He also reported that a new faculty member, Willard Rush, will be joining us this fall.

Mr. Powell then opened the floor for discussion, asking specifically what the committee members have observed in the Electronics Technology Program that they believe needs to be changed. The following suggestions were made:

- 1. Training in AC and DC machinery should be a part of this curriculum, possibly two courses with a lab. Such courses already exist as part of the Electrical Trades Technology curriculum, ETT 106 and ETT 112. This points to the need to merge the two curricula.
- 2. Many of our graduates will find jobs at small companies as electronics technicians. Their jobs will not be focused in just one area. To prepare them for a wide range of responsibilities, they need a broader background of instruction than we are now providing.
- In addition to what is already being taught, students need a knowledge of microcomputers, including software, communications, and networking.
- The computer repair instruction needs to be updated. Equipment students are presently using was current ten years ago. The most common equipment in use in the real world today is the IBM XT and AT. Microprocessors most commonly in use are the 8088, 80286, and 80386. It is necessary for graduates to learn on the job how to work with this equipment, since they are not exposed to it during their studies here. We should have this up-to-date equipment in our lab.
- 5. There is a need for integration or merger of the Electronics Technology and Electrical Trades Technology Programs. The committee suggested adding the following courses from the Electrical Trades Program to the already existing Electronics Technology curriculum in order to create such a merged program:

ETT 106 ETT 111 ETT 112 ETT 113 ETT 114 ETT 133

ETT 134

6. The level of preparedness of students entering the program would be an issue in merging the programs, since the Electronics Technology curriculum has more specific course requirements in the areas of math, science, and communication skills. Those people in the current Electrical Trades Program who do not have a strong math background could be expected to have difficulty with some ELT courses they would be required to take under the merged program.



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- 7. In naming the merged program, the word "Trades" should be eliminated.
- 8. ETT courses included in the new program will need to be taught above a "trades" level.

Since the College cannot continue to support both curricula due to declining enrollment, Mr. Powell has prepared a proposed outline for a merged curriculum. It is hoped that the merger can take place by Fall, 1990, or Fall, 1991.

Mr. Powell will send a copy of the modified curriculum proposal to the advisory committee for review before the next committee meeting.

The next meeting of the Electronics Technology Advisory Committee will be on Tuesday, July 18, probably in the late afternoon. Mr. Powell will make arrangements and notify the committee of time and place.

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Attachment

pc. Dr. Christine Gram Dr. Bill J. Rose