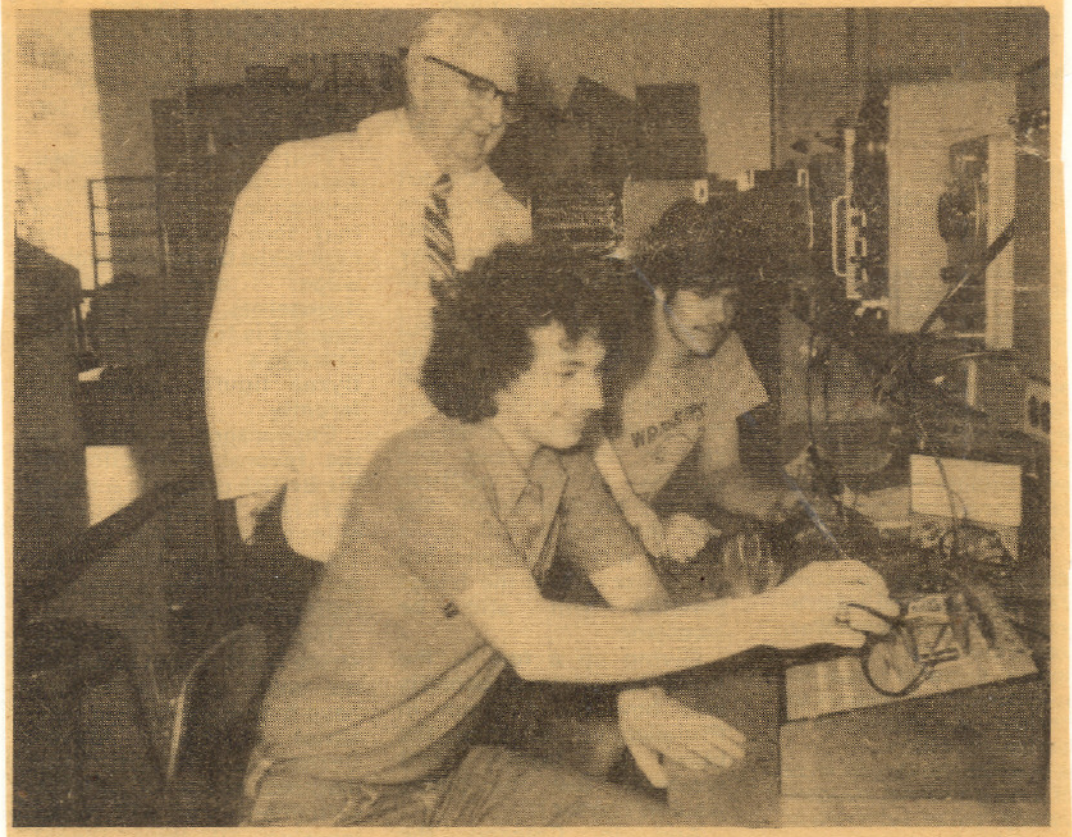
Electronics is popular course at Carbon Vo-Tech

By Joe Boyle



RESONANT CIRCUITS are being studied by two Weatherly students under the watchful eye of A.R. Breiner, Tamaqua, instructor of the Electronic Technology course at the Carbon County Vocational-Technical School in Jim Thorpe. They are, from left, Chuck Houser and Bill French.

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Tools used in vocational-technical education are not necessarily a hammer, saw or trowel.

Tools can be anything from a mannequin to a computer, as many Carbon County students are learning.

One of the 15 courses offered is Electronic Technology—the study of basic electrical circuits and circuit systems. It is designed to develop an understanding of the principles involved in industrial electronics, radio, television, radar, communications, and other electronic fields.

It is not a course in television or radio repair. It features theory and practical experience in AC and DC circuits employing vacuum tubes and/or transistors. Instruction also includes the use of various types of testing equipment used in analyzing, testing and servicing electronic equipment.

In addition to providing the student with a fascinating insight into the realm of electronics, the course offers an invaluable opportunity to prepare for challenging and meaningful careers in the years ahead.

Tamaqua Instructor

A.R. Breiner, Tamaqua, conducts the course and, as a way of introducing prospective students to his department, asks these questions concerning this intriguing study:

What is it?

What will it teach me?

What does the training really cover?

How much will it cost me?

Are there jobs available in electronics?

"These," say Mr. Breiner, "and many more are just a few of the queries that come from students planning to enroll at the Vo-Tech School this year."

As for the first question, this can be answered almost directly by each individual, Breiner explains.

"Stop! Look around you; in your home there are more electronically-controlled devices than you have fingers and thumbs," he says while pointing to the micro-wave oven, digital [illegible]n clock and then, too, the speed control on dad's electric drill. But that's not all.

Let's not forget the stereo, FM radio and TV. They fill only a very small niche in the overall technology scheme of things. The family car is another example where electronics is rapidly taking over the control circuitry.

"To put it all in a nut shell," the Tamaqua educator says, "we can define Electronic Technology as pertaining to all things that operate by means of electricity."

If you want to enter the field of radio and television repair, this is an extremely small segment of the electronic field. In order to understand the principles and operation of radio or a video set, all of the basic electrical theories must be understood, together with some knowledge in the use and operation of some simple testing and measuring equipment, such as meters, oscilloscopes and signal generators.

The basic Vo-Tech course covers all of this, in addition to electronic components and parts, resistors, capacitors, coils, transformers, printed circuits, and the transistor. Advanced training adds integrated circuits and digital instruction for the student interested in computers.

Exploration Work

Following this instruction on basics, the resonant circuits are explored. The experience and principles attained in this area remain the same, regardless of whether they are found in a TV set, a CB transmitter, or a complex aircraft radar installation. Special filter systems are designed and fabricated by each student. One such filter design will end up on his home TV set to eliminate unwanted noise and other interference on the picture.

Another part of the course covers AM and FM radio receivers and transmitters for the student who wishes to pursue commercial or industrial broadcasting. Sufficient theory and Federal Communications Law are presented so as to obtain an amateur radio operator and station license. This license alone is a good stepping stone into the commercial broadcasting field. The Vo-Tech classroom has an active amateur station which permits the licensed students to get actual on-the-air operating experience.

How about computers? Although the class does not have a $10,000 computer, the principles of computer technology are covered by means of digital and integrated circuit projects. The basic tools of the trade used at the Carbon County facility are the same, regardless of what the electronic occupation is related to.

So, if you are college-oriented and plan on electrical or electronic engineering as a career, Advanced Standing Credit is granted the Vo-Tech student in practically all colleges and trade schools in Pennsylvania. These include Lehigh County Community College, Penn State University, Lincoln Technical Trade School, Wilkes College, Lehigh University and others. What this means to you is that you are not required to take this portion of the instruction over again at college. Hence, a saving to you in tuition.

On the subject of tuition, the same course of instruction given at CCVT is offered by one of the area trade schools for $6,000 to the 1979 high school graduate. This will escalate to $7,000 this year.

Opportunities A-Plenty

Vo-Tech graduates are working for Bell Telephone Co., area broadcasting stations, Bethlehem Steel Corporation, Hull, Inc., and Lehighton Electronics. Some others have chosen to pursue careers in the United States Armed Forces in one of the electronic fields offered. Two have become electronic engineers and three are presently at Penn State University and Wilkes College, working for their degrees.

Some have entered industry and electronic fabrication, many with a lead or foremanship position. Area TV repair shops such as Ace Electric in Lehighton and others in the Hazleton area have hired the electronic graduate of Carbon County Vo-Tech. Others will be found with the Blue Ridge Cable Company, Viking Injector, Inc., DeVry Computer Electronics, General Electric, Western Electric, WYNS radio and many more not [illegible]d here.

If the questions you had about the Carbon County Area Vocational-Technical School electronics course have not been answered fully in this overview, you could get the straight 'scoop' and answers by just dropping in at the school on the east side of Jim Thorpe and see the electronics class in operation.

Bring your parents; invite a friend.