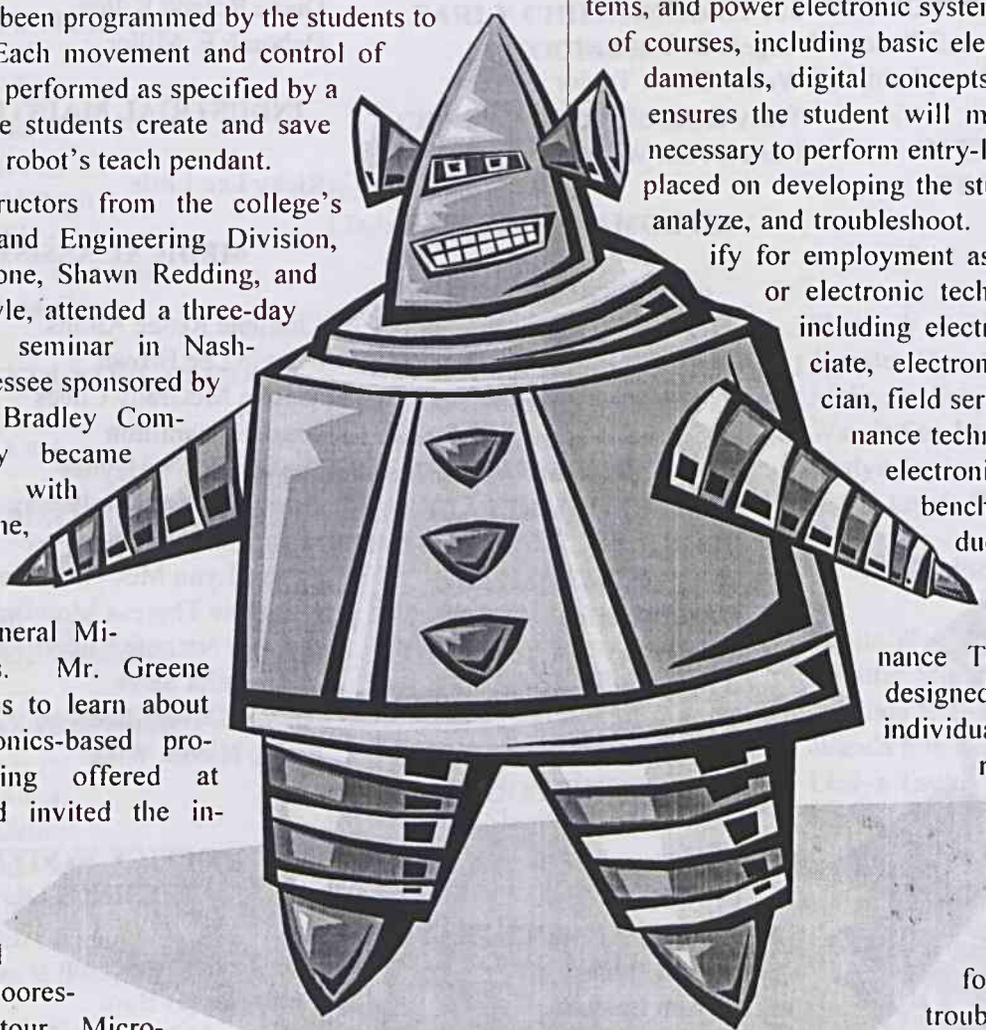
New Engineering Instructor

The Wilkes Community College Industrial and Engineering Division has a unique new instructor. Although he works for no salary or benefits, this new addition to the college's team of instructors is touted as a most valuable addition. WCC's newest instructor is a robot.

The ADEPT robot, designed to assemble electronic circuit board, was donated to Wilkes Community College by General Micro-Circuits of Mooresville, NC. The robot is fully-functional and in need of no repair; therefore, when the company upgraded with a faster, more detailed model it was decided to donate it rather than sell or scrap it. Thanks to their generosity and the professionalism of WCC instructors, the robot has found a new home on the campus of Wilkes.

The robot has four axes of movement with fully-functional cameras attached that can monitor each movement from a remote location. Interfaced with any computer in the college, these cameras allow instructors and others to monitor the robot's performance of the operations it has been programmed by the students to perform. Each movement and control of the robot is performed as specified by a program the students create and save through the robot's teach pendant.



When instructors from the college's Industrial and Engineering Division, Richard Stone, Shawn Redding, and Robert Doyle, attended a three-day automation seminar in Nashville, Tennessee sponsored by the Allen Bradley Company, they became acquainted with Cliff Greene, an electrical engineer at General Micro-Circuits. Mr. Greene was anxious to learn about the electronics-based programs being offered at Wilkes and invited the instructors to bring their students for a field trip to Mooresville to tour Micro-Circuit's operation.

Lead instructor for the college's Industrial Maintenance Technology program, Richard Stone, described the robot: "This robot is an immeasurable asset to our program. For the students to have the opportunity to actually gain hands-on experience programming and operating a piece of equipment of such cutting-edge technology is invaluable to our program. We appreciate the interest General Micro-Circuits has shown in our students and this generous gift."

Skeptics may ask, "What's in this for a large company like Micro-Circuits?" The answer is simple- graduates. There is a growing demand for good employees with basic skills in electricity and electronics. Graduates from WCC's Industrial Maintenance Technology and Electronics Engineering Technology programs fit the bill perfectly.

The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, telecommunication systems, and power electronic systems. A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts and microprocessors, ensures the student will master the competencies necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to think, analyze, and troubleshoot. Graduates should qualify for employment as engineering assistants or electronic technicians with job titles including electronic engineering associate, electronic engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

The Industrial Maintenance Technology program is designed to prepare or upgrade individuals to service, maintain, repair, or install equipment for a wide range of industries. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities. Students

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