

Blue Ridge Community & Technical College Software Development Engineering

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Program Summary

Blue Ridge Community and Technical College's program in Software Development Engineering offers students hands-on training to learn technical and innovative engineering solutions, coding, programming, communication, and troubleshooting skills that are essential to working efficiently in entry-level software development jobs. This program, led by industry experts, features coursework on the latest technical skills to develop, design, and maintain software through a virtualized environment combined with opportunities to learn the soft skills necessary to succeed in today's technology workplaces.



Strengths & Noteworthy Practices

The program recognizes that students do not only code programs to solve problems; they also have to effectively communicate their problem-solving process—explaining what questions they plan to ask, what type of data they expect the user to enter, the prompts they will use to encourage the user to enter valid data, the output that will be printed on the screen, and a description of the overall flow of the program.

Several courses incorporate teamwork into assignments. For the capstone project in IT 269, students develop a progress/status report addressing where the project stands at a point in time in terms of the triple constraint—meeting scope, time, and cost goals. Student teams give presentations at each phase of the capstone project and a final presentation, and all team members are required to participate in the presentation.

ALL students complete a Field Experience course (CGEN 292) that includes an internship alongside content such as resume preparation, interviewing, networking, and general workforce skills. Learning outcomes include the ability to describe professional behavior in a business environment, applying concepts acquired in the classroom to actual work performance, analyzing work duties and comparing and contrasting them with classroom learning, evaluating work performance in relation to professional, ethical, and academic expectations, and producing documents and role-playing skills to present oneself to potential employers professionally.