



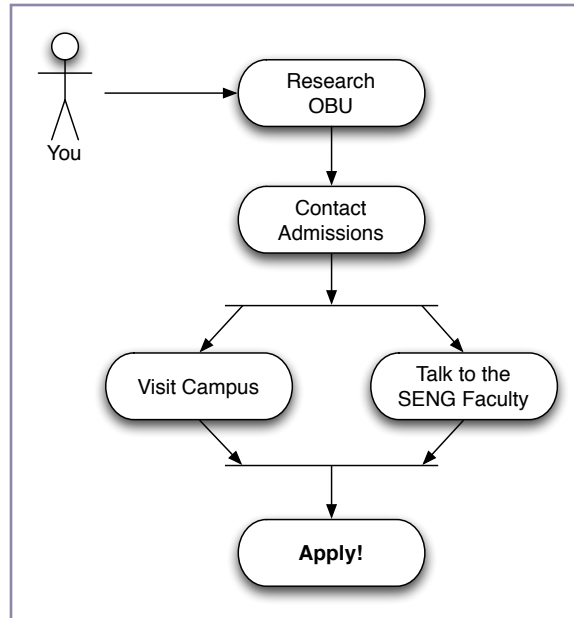
### WHAT IS SOFTWARE ENGINEERING?

Software Engineering (SE) is the discipline that creates and maintains software applications by applying technologies and practices from computer science, project management, engineering, application domains, and other fields. Not just “coding,” it is the thorough understanding of the entire process from Planning through Design, Development, Testing, and Deployment. Software Engineers have a firm grounding in the concepts of Computer Science, but this program varies widely from a Computer Science degree.

### IS THIS THE MAJOR FOR YOU?

What type of person does it take to succeed in Software Engineering? First, a lot of majors have no experience with programming in high school, so don't let your lack of background knowledge deter you. It helps to be determined, able to think abstractly, and good at solving puzzles. Designing new software is like working with a team to put together a big puzzle. Each person adds a piece and each part depends upon the others.<sup>1</sup>

<sup>1</sup>[www.collegeboard.com](http://www.collegeboard.com)



### MORE INFORMATION

OBU is the place to connect your potential with your future in a loving, Christ-centered environment. For more information about how OBU can help you to reach your goals, or for any general information, contact us via the following means:

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#### SOFTWARE ENGINEERING:

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1-870-245-5328

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#### OBU:

1-800-DIAL-OBU  
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# OUACHITA

## SOFTWARE ENGINEERING



### INNOVATIVE

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*“Employment of computer software engineers is expected to increase by 52 percent from 2008-2018, which is much faster than the average for all occupations.”*

- Bureau of Labor Statistics

Ouachita's Software Engineering program is the first of its kind in the state of Arkansas. And according to the College Board, around thirty institutions offered undergraduate degrees in Software Engineering in 2009. Ouachita is proud and excited to be at the forefront of this contemporary and innovative field!



# Software Engineering at OBU

## DEGREES AND COURSES

OBU offers a Bachelor of Science in Software Engineering. The Software Engineering core consists of eight classes covering the entirety of the SE process. Additionally, courses are required in the areas of Computer Science (Introduction to Computer Science, Programming I and II, Data Structures, and Database Management) and Mathematics (Discrete Mathematics I and II and Elementary Statistics). There are also exciting electives to pursue in topics such as Game Design and Graphics, Internet Development, Artificial Intelligence, and Current Languages.

OBU is a liberal arts university; as such, students are required to take a broad core of courses in many disciplines rather than focusing the vast majority of their education on one field of study. This form of education produces a well-rounded, knowledgeable graduate who is ready to be a good citizen of their community and of the world while having the critical thinking skills to be successful in their chosen field.

## FACULTY AND ENVIRONMENT

The Mathematics and Computer Science department has faculty that are fully committed to Christ and to their students. Class sizes are small (even freshman level courses) to allow for significant student-faculty interaction.

The software engineering faculty have industry experience in such roles as Software Engineer, Database Administrator, Software Architect, Operations Leader, and Project Manager. This allows for meaningful “real-world” discussions on the application of the topics being mastered by the students.

## COMPUTING FACILITIES

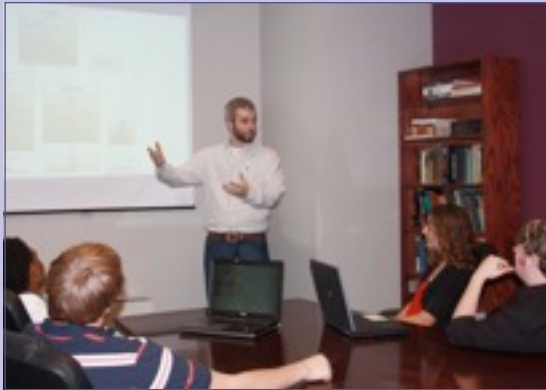
Majors in the department have card-reader access to their own 24-hour computer lab populated with dual-boot iMacs from Apple Computer. This not only provides the students with the option to use either the Windows or Mac operating system for their everyday work, but it also gives them the opportunity to explore multiple computing platforms, broadening their experience and making them more attractive to prospective employers.

Additionally, OBU provides students with the option to connect their own computers to the campus network, via either wired or wireless connection.



## SOFTWARE ENGINEERING COURSES

- Introduction to Software Engineering
- SE and Human Computer Interaction
- Software Construction
- Software Design and Architecture
- Software Quality Assurance and Testing
- Software Requirements Analysis
- Software Project Management
- Software Engineering Capstone



## CAREER OPPORTUNITIES

Graduates can expect career opportunities in software design and development in a variety of application areas. Software engineering graduates are particularly well-suited to work as members or leaders of software project teams. They have knowledge and skills to help them develop quality software within schedule and cost constraints.

About 295,000 new computer software engineers are expected to be added to the workforce through 2018, a huge increase for a job already in demand.

The Bureau of Labor Statistics reports that, in 2006, the median annual earnings of software engineers were over \$79,000. According to the National Association of Colleges and Employers, starting salary offers for 2007 graduates with a bachelor's degree in computer software engineering averaged over \$56,000.