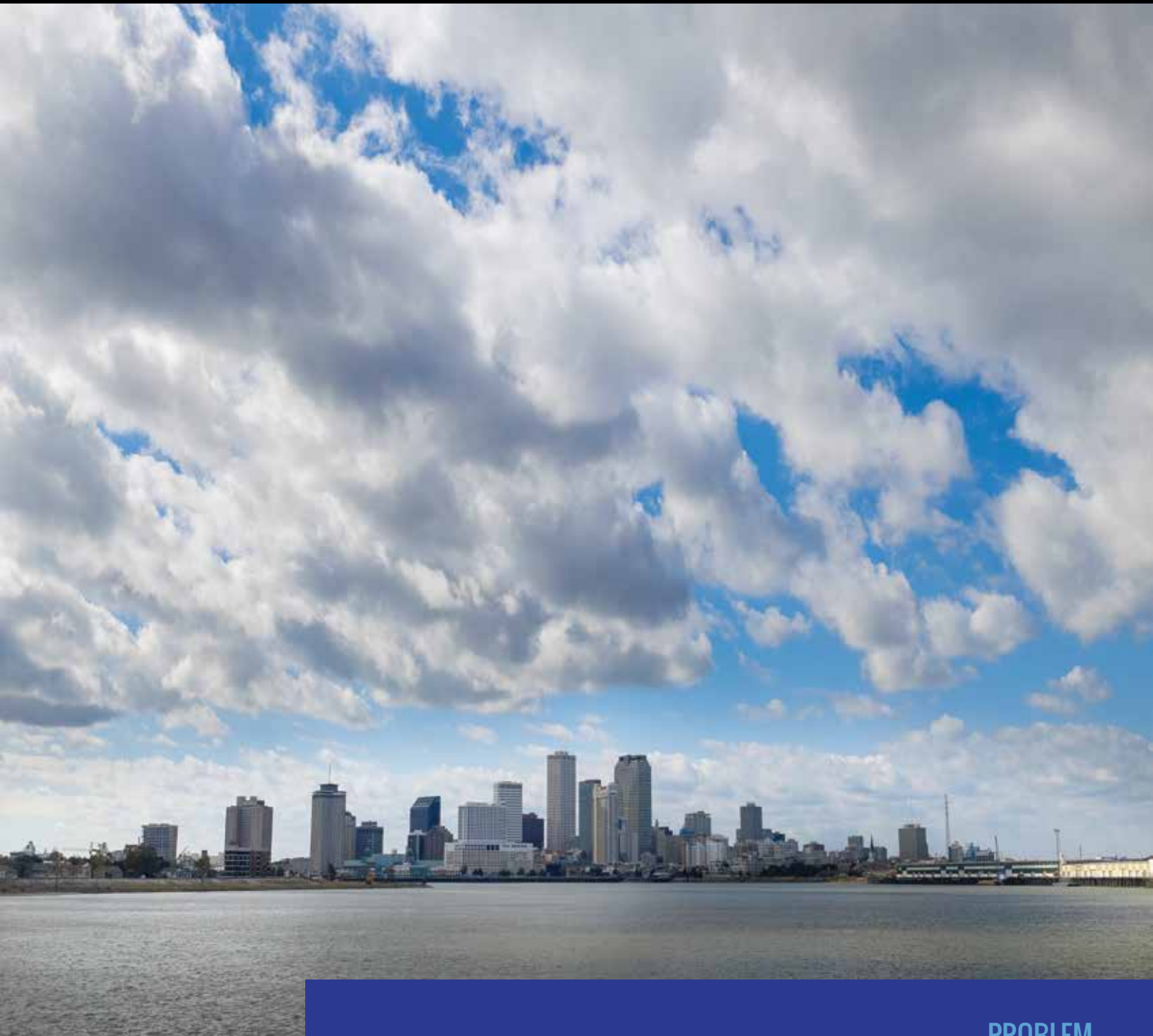</> LOYOLA UNIVERSITY NEW ORLEANS

CERTIFICATE IN SOFTWARE DEVELOPMENT AND CODING

SUMMER 2017

JUNE 5 TO AUGUST 11, 2017
10-WEEK IMMERSIVE PROGRAM

Local tech companies struggle to find qualified entry-level talent in Louisiana, while local talent needs jobs. Currently, there are an estimated 3,000 unfilled tech jobs in the state.

SOLUTION
The Loyola Certificate in Software Development & Coding bridges the "gap to workforce" for recent graduates by teaching them in-demand coding skills & connecting them to entry-level tech jobs. This drives both industry growth & local economic development.

program overview

The Loyola University Certificate in Software Development and Coding is an immersive 10-week "bootcamp" in software development for recent graduates, no matter their major or experience level with coding. This program bridges the gap between a liberal arts degree and a career and focuses on building a real-world portfolio of work to qualify graduates for entry-level tech jobs in many industries.

Our program is working with employers in New Orleans to identify the coding skills they need for entry-level positions, teach those skills through the program, then directly connect program participants to these companies, which are ready to hire. The program is taught in-person by local industry professionals from leading New Orleans-based software development studio LookFar. These practitioners bring real-world subject matter expertise to every module of the curriculum, which has been designed by our program partner Tech Talent South and tested across thousands of students in over a dozen cities.

Upon successful completion of the program in August 2017, students will receive the Loyola Certificate in Software Development and Coding, have developed a portfolio of work, and have positioned themselves for an entry-level job with a local technology company.

skills students will develop

The program is designed to develop student skills in the following core areas:
- Build and design responsive webpages with core languages HTML & CSS
- Design faster webpages using front-end frameworks like Bootstrap
- Create web application frameworks with JavaScript
- Prototype database-driven apps
- Deploy custom-built applications to the web using cloud-based hosting
- Understand the difference between NoSQL and SQL-based databases, with basic SQL management and querying
- Integrate third-party APIs into an application and pull in data from sources like Google Maps, Stripe, and Facebook
- Apply the crucial skill of domain modeling resources and relationships in database-backed applications

Note: Curriculum is subject to modification.

application & timelines

The initial round of applications is due from students by December 16, 2017, and the program tuition is $6,999 for 10 weeks. (Similar programs nationally cost between $9,000 and $15,000.) The first 10 students to complete an application and submit a deposit will receive a $500 tuition discount. The application process includes completing an application of interest at bit.ly/loyno-code17, followed by a series of pre-class exercises and a program orientation session.

partner with us

Technology is an emerging driver of economic development in New Orleans, and software development jobs are available across a broad spectrum of industries. Jobs in tech can open opportunities for our entire community.

However, local tech companies need a larger pool of entry-level tech talent in order to grow, and local graduating seniors need jobs that will let them stay in the area. There are an estimated 3,000 unfilled positions in the tech sector in Louisiana. Over the next five years, the Certificate program has the potential to train up to 125 students for entry-level technology positions in New Orleans.

A SOLUTION FOR NEW ORLEANS

Loyola University New Orleans is a local institution committed to building a solution for local companies. To make sure that we are training talent to be relevant to the needs of employers, we are working with companies in New Orleans to help us co-create or even teach all or a portion of the specialization tracks in the last weeks of the Certificate curriculum. This way, local companies can have the chance for early exposure to meet program participants immediately prior to graduation.

By working with the Certificate program, employers can also take an active role in developing the workforce they need, rather than passively waiting for programs to develop the candidates they seek. Together, we can address the skills gap in Louisiana's workforce, support local tech entrepreneurs so they can scale, diversify our tech workforce, and drive overall economic growth in the Greater New Orleans region.

STUDENT PROFILE

Our program's students will have majored in various subjects, but all will have four-year liberal arts degrees, during which they have gained the critical thinking, analytic, and communication skills to make them intellectually curious and inherent problem-solvers.

The Loyola Certificate program adds the technical skills they need to succeed as entry-level software developers and programmers in client-facing roles, analyst positions, project management, and other jobs that need both soft skills and technical knowledge. Over the course of ten weeks, program participants will receive approximately 96 hours of interactive lecture content as well as 160+ hours of workshop and studio time, when students will apply what they have learned to build a portfolio of projects.

CONTACT

For more information on opportunities to partner with the Loyola Certificate in Software Development and Coding, contact **Jon Atkinson**, Director of the Loyola Center for Entrepreneurship and Community Development, via email at jjatkins@loyno.edu or at (504) 864-7938.

LOYOLA UNIVERSITY NEW ORLEANS
CERTIFICATE IN SOFTWARE DEVELOPMENT AND CODING

daily schedule

MONDAY-FRIDAY (10 WEEKS)

9:00 AM-11:00 AM	Lecture Session I
11:00 AM-11:15 AM	Break
11:15 AM-12:30 PM	Lecture Session II
12:30 PM-1:30 PM	Lunch Break
1:30 PM - 3:30 PM	Workshop/Studio & Office Hours

core curriculum

A sample breakdown of the core curriculum is below:

WEEK 1: Intro to programming and Front-End Web Development
Includes theoretical review, HTML/CSS, Twitter-Bootstrap, responsive web pages

WEEK 2: Git and JavaScript Fundamentals
Includes Git, GitHub, JavaScript introduction & syntax, basic operation & control flow, data collections, usage of arrays & objects, functions in objects

WEEK 3: Continuing with JavaScript
Includes scope, closures, asynchronous patterns & callbacks, object-oriented concepts, AJAX, intro to APIs and remote data calls

WEEK 4: New JavaScript and Front-End Tie-ins
Includes ES5 & ES6(2015), interactive web pages, JavaScript DOM API, jQuery

WEEK 5: Back End JS
Includes web application structure & setup, class syntax & models, NodeJS, JS packages & dependencies, JavaScript-specific build tools

WEEK 6: Working with Databases and Intro to MVC
Includes SQL, NoSQL, MongoDB, managins & querying colletions, domain modeling, Express, Angular, MVC, Jade

WEEK 7: Continuing with MVC and MVC on the Front-End
Includes AngularJS, data management, Angular directives, data requests, and services

WEEK 8: API incorporation, introduction to testing and deployment
Includes HTTP, REST, endpoints (JSON), third-party APIs, test-driven development, hosting applications, production vs. local environment