2014 Programming Bootcamp Survey

Programming Bootcamp Graduation Expected to Grow by 175% in 2014, Based on Responses from 95% of US Schools

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Key Findings

Programming bootcamps are a fast-growing industry that will graduate nearly 6,000 students in 2014. Course Report found:

- In 2014, the bootcamp market will grow by 2.8x, to an estimated 5,987 graduates in 2014, up from 2,178 in 2013.
- As a point of comparison, we estimate that there were 48,000 undergraduate computer science graduates from accredited US universities in 2013.[1]
- Average tuition price of qualifying courses is $9,900, with an average program length of 10.4 weeks.
- We estimate that tuition revenue from qualifying US schools will be $59mm in 2014, excluding scholarships. Some schools collect placement fees from employers for students accepting full-time jobs after graduation.
- Ruby is the most common teaching language, used in 57% of courses.

Methodology

In our inaugural Course Report Survey, we surveyed a total of 43 US-based programming schools, commonly referred to as bootcamps. Of the schools surveyed, which had to meet a set of criteria described below, 41 completed the survey, for a response rate of 95 percent. The surveys were sent to school representatives and graduation figures are self-reported by the respondents.

Criteria. To qualify for inclusion in the survey, a school must (a) offer full-time, in-person instruction of 40 or more hours of classroom time per week, (b) not be associated with an accredited college or university, (c) provide programming-specific curriculum (schools specializing in product development, design, or marketing were excluded), and (d) based in the United States. Many schools offer courses at multiple campuses across a wide range of

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[1] We estimated undergraduate CS graduates by using the 2013 Taulbee Study, published by the CRA (http://cra.org/resources/crn-archive-view-detail/2013_taulbee_report_sneak_preview/). The Taulbee Study is a survey of PhD-granting departments, released annually in May. The National Center for Science and Engineering Statistics compiles statistics on undergraduate degrees, but hasn't published statistics since 2011. We assumed that Taulbee captured 26% of the total undergraduate degrees, based on the most recent comparison published at http://cra.org/resources/crn-archive-view-detail/counting_computing_cra_taulbee_survey_and_nsf_statistics/.

curriculum. Respondents were asked to only report on courses meeting the above criteria (full-time, in-person, non-accredited, programming-specific, US).

2014 forecast. All respondents reported the number of students who graduated in 2013. All but four of the respondents provided estimates of 2014. In estimating growth rate, we only considered schools reporting both 2013 and 2014 graduation counts.

Course analysis. In addition to survey responses, we utilized the Course Report database of individual course sections to identify a sample of 164 courses. To qualify for our sample, the course needed to meet all of the above criteria and have a start date in 2014. We had at least one course for 89 percent of the survey respondents.

Survey Results

Market Size

After surveying school representatives from the 43 qualifying US-based programming bootcamps, Course Report estimates a 175% growth rate for the programming bootcamp market in 2014.

Table 1: Market Growth Rate

2013 graduates, self-reported	2,178
2014 graduates, self-reported	5,987
Estimated growth rate	175%

Among the respondents, ten schools reported no graduates in 2013. That group expects to graduate 824 students in 2014. Among the schools operating in 2013, all but three schools expect to grow. The fastest-growing school with more than 50 graduates in 2013 is expecting to grow by 345% in 2014.

The number of schools offering full-time programming courses in the US has increased from 33 in 2013 to 43 in 2014.

Tuition

Tuition ranges from free to $20,000 for a course, with an average tuition of $9,920. Courses range from 4 to 30 weeks, but most courses are in the 9-12 week range. Our study focuses on full-time programs, where students typically commit at least 40 hours per week, between classroom and programming time.

Table 2: Tuition Range

Tuition	%
Less than $5,000	13%
$5,000 - $10,000	44%
Greater than $10,000	43%

Based on our estimate of 5,987 students in 2014, we estimate tuition revenue at $59mm in 2014, excluding rebates and scholarships.

Many schools offer job-placement rebates, ranging from a few thousand dollars to the entire tuition. Typically, rebates are offered to students who receive a qualifying job through the school's job placement program.

Teaching Languages

Programming bootcamps are predominately taught in Ruby, with 57% of courses reporting Ruby as the primary programming language. However, most programs focus on full-stack web development, with significant instruction time spent on JavaScript/CSS/HTML. 13% of the courses analyzed focused only on front-end web development instruction.

Table 3: Top Teaching Languages

Teaching Language	% Courses
Ruby	57%
JavaScript	13%
Objective-C	9%
Python	8%
.NET	5%
PHP	4%
Other	4%

Participating Schools

- App Academy
- Code Fellows
- Codeup
- Coding Campus
- Coding Dojo
- Coding House
- Craftsmanship Academy
- Deep Dive Coders
- Dev Bootcamp
- Dev League
- DevMountain
- Dev/Iowa Bootcamp
- Epicodus
- Flatiron School
- Fullstack Academy
- General Assembly
- gSchool
- Hackbright Academy
- Hack Reactor
- Iron Yard
- Launch Academy
- Maker Square
- Metis
- Mobile Makers Academy
- Nashville Software School
- New York Code + Design Academy
- Omaha Code School
- Prosper IT Academy
- Rocket-U
- Sabio.la
- SeedPaths
- Software Craftsmanship Guild
- Starter League
- Startup Institute
- Tech Talent South
- Turing
- TurnToTech
- Wyncode
- Zipfian Academy

About Course Report

Course Report, founded in 2013 by Adam Lovallo and Liz Eggleston, operates https://www.coursereport.com/, which helps potential students find and research programming bootcamp programs. Course Report offers a directory of schools, course schedules, and interviews with teachers, founders, students, and alumni.