

2015 Coding Bootcamp Survey

Coding Bootcamps Expected to Graduate 16,056 Students and Grow by 138% in 2015, Based on Responses from 94% of US & Canadian Schools

By Liz Eggleston June 8, 2015

Key Findings

Coding bootcamps continue to flourish as an industry that will graduate over 16,000 students in 2015. Course Report found:

- In 2015, the bootcamp market will grow by 2.4x, to an estimated 16,056 graduates in 2015, up from 6,740 in 2014.
- As a point of comparison, we estimate that there were 48,700 undergraduate computer science graduates from accredited US universities in 2014.¹
- Our <u>2014 Market Sizing Study</u> projected the 2014 market size to be 5,987 graduates. Our 2015 study finds that the actual market size in 2014 was 6,740 graduates. Thus our 2014 report underestimated year-over-year growth by 11%.
- Average tuition price of qualifying courses is \$11,063, with an average program length of 10.8 weeks.
- We estimate that tuition revenue from qualifying US schools will be \$172M in 2015 (up from \$52M in 2014), excluding scholarships.
- Ruby is the most common teaching language, used in 35% of courses. Bootcamps will
 graduate 9,748 Ruby developers in 2015. While Ruby remains popular, JavaScript has gained
 popularity in the past year, now accounting for 21% of courses.

Methodology

In our second annual Course Report Survey, we surveyed a total of 67 US/Canada-based coding schools, commonly referred to as "bootcamps" or "accelerated learning programs." Of the schools surveyed, which had to meet a set of criteria described below, 63 completed the survey, for a

¹ We estimated undergraduate CS graduates by using the 2014 Taulbee Study, published by the CRA (http://www.cra.org/taulbee/Taulbee2014Results.pdf). 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-viewdetail/counting_computing_cra_taulbee_survey_and_nsf_statistics/.



response rate of 94.45 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 coding-specific curriculum with a focus in Full-Stack Web Development, Mobile Development, or Front-End Web Development (a separate report will be released for schools specializing in product development, data science, design, or marketing), and (d) based in the United States or Canada. Many schools offer courses at multiple campuses across a wide range of curriculum. Respondents were asked to only report on courses meeting the above criteria (full-time, in-person, non-accredited, programming-specific, United States/Canada).

2015 forecast. All but one respondent reported the number of students who graduated in 2014. All but three of the respondents provided estimates of their expected, 2015 graduate total.

Course analysis. In addition to survey responses, we utilized the Course Report database of individual course sections to identify a sample of 115 courses (used in Table 2 and Table 3). To qualify for our sample, the course needed to meet all of the above criteria and have a start date in 2015.

Survey Results

Market Size

After surveying school representatives from the 67 qualifying US/Canada-based coding bootcamps, Course Report estimates a 138% growth rate for the coding bootcamp market in 2015.

Table 1: Market Growth Rate

2014 graduates, self-reported	6,740
2015 graduates, self-reported	16,056
Estimated growth rate	138%

Among the respondents, 13 schools reported no graduates in 2014. That group expects to graduate 585 students in 2015. Among the schools operating in 2014, all but 4 schools expect to grow. The number of schools offering full-time programming courses in the US has increased from 43 in 2014 to 63 in 2015.

Tuition

Tuition ranges from free to \$21,000 for a course, with an average tuition of \$11,063. Courses range from 4 to 28 weeks, but most courses are in the 9-12 week range with an average of 10.8 weeks. 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

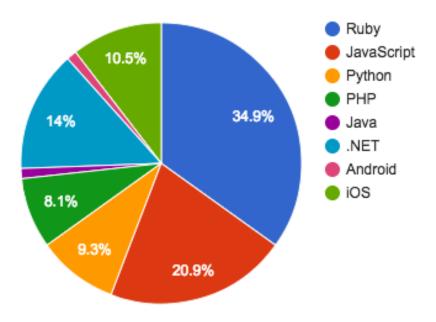
Tuition	%
Less than \$5,000	6.35%
\$5,000 - \$10,000	55.56%
Greater than \$10,000	38.10%

Based on our estimate of 16,056 students in 2015, we estimate tuition revenue at \$172M in 2015, excluding rebates and scholarships. Some schools also collect placement fees from employers for students accepting full-time jobs after graduation. 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

Coding bootcamps are predominantly taught in Ruby, with 35% 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. Over the past year, Full-Stack JavaScript has been emphasized at several schools (MakerSquare changed their curriculum from Ruby on Rails to JavaScript in 2015).

Table 3: Top Teaching Languages





Location

As of April 1, 2015, there are bootcamps in 51 US and Canadian cities.

Top 5 Cities with Most Bootcamps

city	# bootcamps
San Francisco	12
New York	9
Seattle	8
Portland	6
Chicago	6

Comparison to 2014 Study

Accuracy

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Canada

The 2015 Market Sizing Study includes Canadian bootcamps. These 6 Canadian bootcamps graduated 480 students in 2014, will graduate an estimated 927 in 2015, and will generate ~\$8M in revenue in 2015.

The most popular teaching language in Canadian bootcamps is Ruby.



Participating Schools

- Ada Developers
 Academy
- App Academy²
- Bitmaker Labs
- CodeCraft School
- BrainStation
- Byte Academy
- Claim Academy
- Code Fellows
- CodeCore Bootcamp
- Coder Camps
- Coder Foundry
- Coder Vox
- <u>Codeup</u>
- Coding Campus
- Coding Dojo
- Coding House
- Craftsmanship Academy
- DecodeMTL
- Deep Dive Coders
- Dev Bootcamp³

- Dev League
- <u>devCodeCamp</u>
- DevMountain
- DevPoint Labs
- Epicodus
- Fire Bootcamp
- Flatiron School
- Fullstack Academy
- General Assembly
- Grand Circus
- Galvanize
- Hack Reactor
- Hackbright Academy
- HackerYou
- Ironhack
- Launch Academy
- LearningFuze
- Lighthouse Labs
- MakerSquare
- Mobile <u>Makers Academy</u>
- Nashville Software School
- New York Code + Design
 Academy

- Notch8 LEARN
- Omaha Code School
- Orange County Code School
- PDX Code Guild
- Portland Code School
- Prime Digital Academy
- RefactorU
- RocketU⁴
- Sabio.la
- SeedPaths
- Skill Distillery
- Software Craftsmanship Guild
- Startup Institute⁵
- Tech Academy Portland
- Tech Talent South
- The Iron Yard
- <u>Turing</u>
- TurnToTech
- We Can Code IT
- Wyncode

Missing from 2015 Study:

11 bootcamps are not included in the 2015 study which were included in 2014, for a variety of reasons.

- **Zipfian Academy** was acquired by Galvanize. Their numbers will be included in a future report under Galvanize.
- Prosper IT Academy is now named "Tech Academy Portland"
- Devatory, Dev Champs, Vivo School of Technology and AIT Learning are no longer operating.

² App Academy reported actuals for 2014 but not projections. The industry growth rate was applied with permission to reported 2014 actuals. To establish an "Industry Growth Rate," we calculated the growth rate from 2013-2014 of actual reported graduates for a growth rate of 2.5x. We only included schools who fully participated in both 2014 and 2015.

³ Dev Bootcamp reported actuals for 2014 but not projections. The industry growth rate was applied with permission to reported 2014 actuals.

⁴ RocketU is no longer operating, but we included their 2014 data.

⁵ Startup Institute did not report actuals nor projections for 2015, but an industry growth rate was applied with permission to their 2014 predicted graduation numbers.



• 1 bootcamp refused to participate and 3 bootcamps were unresponsive.

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 coding bootcamp programs. Course Report offers a directory of schools, course schedules, and interviews with teachers, founders, students, and alumni.