

Worksheet
Self-Supporting, For-Credit Programs

This worksheet provides more detailed information related to the **Proposal for Self-Supporting, For-Credit Programs** form. Please submit the worksheet with your proposal form to continuinged@fau.edu

1. Attach a detailed budget for the program, including:
 - Costs for faculty (auxiliary funded)
 - Staff Salaries (New hires or percent of existing E&G personnel)
 - Registration/admissions
 - Marketing
 - Catering
 - Space rental
 - Books/materials/technology
 - Scheduling/program administration/student services
 - Other associated costs.

A detailed budget is attached.

2. In your budget, please acknowledge the revenue from tuition and local fees collected by FAU and deductions for overhead fees such as Auxiliary Overhead and Provost Fee. This can be the same budget that was submitted to the Auxiliary Chargeback committee for approval.

The budget includes the amount for revenue and local fees, as well as overhead fees. Information on how these amounts were calculated can be found under #1 and #4 of the budget details. In addition to the fees listed, the College expects to spend 80% of the yearly cash balance, further adding to the overhead fees generated by the University.

3. Provide specific information about auxiliary funding source (smart tag) for all expenses related to the proposed self-supporting program.
 - o Has the Chargeback Committee provided a new auxiliary smart tag for this program?
 - o Provide a statement of start-up funds for the self-supporting program and funding for the first 3 years. Consider that the revenue generated from a new program typically will not fully support all direct and indirect costs before year 2, or later.

Please note: For FAU faculty, self-supporting courses must be taught outside of faculty load. Faculty must be paid through an auxiliary account for self-supporting courses. Faculty may not teach self-supporting courses as part of their E&G teaching assignment.

The College will request an auxiliary tag from the Chargeback Committee once the program is fully approved. We expect to use the funds generated from this program for all expenses related to it.

Currently, the College has an auxiliary tag (TAG000119) for another self-supporting program (Professional MSCS). The reserves in this account will be used as start-up and to cover any shortfall in the first few years, as needed.

No E&G funds will be used in connection with this program. Any current faculty selected to teach in this program will do so as overload. Adjunct faculty may also be used to ensure FAU overload limits are adhered to.

4. Provide enrollment and graduation data for the current E&G program for the past 3 years.

	2016-17	2017-18	2018-19
Enrollment*	436	442	508
Graduation	145	137	146

*Note: Enrollment listed in the IEA dashboards and reported here does not include Pre-engineering students that are in the process of completing lower level requirements. These students cannot declare BSCS as their official major until all lower level requirements are met. Each year, there are approximately 145 pre-engineering students that are enrolled in courses for the BSCS degree and have not been accounted for above.

5. Will minors be enrolled in any courses in the proposed program?

No minors will be enrolled in the proposed program.

6. Will the self-supporting program provide concierge service to students? If yes, has staff been identified and services defined?

Yes, the program will provide concierge service to include registration, parking, financial aid, etc. Students will be assigned a Coordinator to be their point of contact for all University services. The cost of a Coordinator to provide these services has been accounted for in the budget.

7. How will student admissions, registration, and customer response service be administered?

Admissions, registration, and customer response service will be provided as concierge service to the students. Services will be administered by a staff person who will be designated solely for student support related to this program (see response to #6 above).

The Center for Online and Continuing Education can provide assistance in the following areas:

- Market Analysis
- Developing a plan for student services (ie., concierge service, registration, after hours response, etc)
- Developing a program flight plan
- Cost analysis and budget projections
- Customer Relationship Management system (CRM) tenant
- Touchnet set-up and reporting

College of Engineering and Computer Science - Professional BS in Computer Science

Year 1	20 Students
Total Course Revenues	\$ 345,000
Total Revenue and Local Fees ¹	\$ (53,832)
COECS Course Revenues	\$ 291,168
Total Direct Expenses ²	\$ (149,188)
Total Indirect Expenses ³	\$ (75,000)
Total Auxiliary Overhead Fee and Provost Fee from Program ⁴	\$ (31,812)
Program Result - Year 1	\$ 35,168

Year 2	45 Students
Total Course Revenues	\$ 603,750
Total Revenue and Local Fees ¹	\$ (94,206)
COECS Course Revenues	\$ 509,544
Total Direct Expenses ²	\$ (243,185)
Total Indirect Expenses ³	\$ (75,000)
Total Auxiliary Overhead Fee and Provost Fee from Program ⁴	\$ (45,150)
Program Result - Year 2	\$ 146,209

Year 3	55 Students
Total Course Revenues	\$ 733,125
Total Revenue and Local Fees ¹	\$ (114,393)
COECS Course Revenues	\$ 618,732
Total Direct Expenses ²	\$ (265,921)
Total Indirect Expenses ³	\$ (75,000)
Total Auxiliary Overhead Fee and Provost Fee from Program ⁴	\$ (48,377)
Program Result - Year 3	\$ 229,434

COECS Program Result - First 3 Years	\$ 410,811
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FAU 3 Year Revenue from Rev Fees/Local Fees/Aux. Overhead/Provost Fee	\$ 387,770
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Yearly Program Result Year 4 and thereafter	\$ 257,144
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We expect the College of Engineering and Computer Science to spend 80% of the yearly cash balance adding additional overhead revenues to the University.

Budget Details:

¹Revenue and Local Fees:

- Local fees per credit for athletics (\$19.27), financial aid (\$5.16), activity & service (\$12.32), health (\$9.42), capital improvement (\$6.76), technology (\$5.16)
- Admin fee at 5.5% of gross revenues

²Direct Expenses:

- Faculty salary at \$9,000 per class plus FICA
- Meals expense at \$40 per day on weekends per student
- Books and materials estimated at \$145.00 per student per class

³Indirect Expenses:

- Program Director at \$8,000 (5.5% of current salary and benefits) for scheduling and program administration
- Coordinator at \$47,000 per year for salary and benefits for admissions, registration, and student services
- Recruiting and marketing expense at \$20,000 for flyers, online advertisements, etc.

⁴Aux Overhead and Provost Fees:

- Provost fee at 3% of expenditures
- Auxiliary overhead fee at 11.19% of expenditures

Market Survey

1. Overview

BSCS is a degree program with a high-growth potential due to a high-demand in South Florida. Although all high education institutions in the region offer the BSCS program, none have a Professional Second Bachelor program in CS. A competitor for students is non-degree coding bootcamp programs. Although coding bootcamps provide a quick fix for the shortage of talent in computer and information technology, students from such a program lacks long-term upward mobility without a BSCS degree. The recruitment target region for the proposed Professional BSCS program is mainly the Broward County, where a great number of professionals with BS degrees is concentrated. By placing the program in the Davie-FAU campus, we expect to meet and exceed the target enrollment figure.

2. Computer Science is a High Growth Field

Computer Science have been identified as a high growth, high demand field for a number of years both locally and nation-wide.

- a. Hanover Research (<https://hanoverresearch.secure.force.com/>) published reports stating that Computer & Information Sciences is a high growth field (based on the available data 2013-2017, both US and FL Program Trends).
- b. CareerSource Broward, where they have identified the following occupations as high demand in the 2019-2020 Regional Demand Occupations List for the County:
 - Computer & Information Systems Manager
 - Computer Network Architects
 - Computer Network Support Specialists
 - Computer Systems Analysts
 - Computer User Support Specialists
 - Database Administrators
 - Information Security Analysts
 - Network and Computer Systems Administrators
 - Software Developers, Applications
 - Software Developers, Systems Software
 - Web Developers

The above professionals are all related to Computer Science.

3. Competitive Landscape

Competitive programs to the proposed Professional BS with major in Computer Science (Professional BSCS) program are mainly two types: CS programs offered by fellow institutions in South Florida and non-degree programs offered by coding Bootcamps.

- a. From Table 1, it can be seen that major competitive CS programs from FIU and U. Miami are growing faster than FAU in the region, therefore there is a room for FAU to grow. On the other hand, none of Florida Institutions offer a Professional BSCS program so far. The proposed Professional BSCS is a unique program and there is no competitor in the area.

- b. From Table 2, one may notice that there is a jump in degrees awarded between the academic year of 2014-2015 and 2015-2016. The growth trend oscillates afterwards. One main factor that contributes to this phenomenon is due to the CAPTURE program, which ended recently. The CAPTURE program boosted the productivity. We need to have a new initiative to give a push to the FAU CS program. We expect that the proposed Professional BSCS program will serve the purpose.
- c. In addition to other institutions in South Florida, bootcamps are competing with us for CS students. According to Course Report (<https://www.coursereport.com/reports/coding-bootcamp-market-size-research-2019#:~:text=>), 23,042 students will graduate from coding bootcamps in 2019. In the US there is an extremely tight labor market and employers are looking beyond college graduates with CS degrees. Currently many of those go to bootcamp to get trained in a narrow set of skills (micro credentials) which have limited upward mobility. These employees lack the breath of the CS degree when companies expand their products and services (Figure 1).
- d. In addition, potential bootcamp students can be attracted to the Professional BS CS program since the BSCS program provides students with fundamental knowledge, including Computational Thinking. Even companies now realize that students from other disciplines with a bootcamp credential may not be ideal employees. They much prefer those who have a BSCS degree and then also went through a coding bootcamp.

4. Student Recruitment

The program targets professionals who have a Bachelor degree in other areas than Computer Science, and who intend to take on jobs that require deep knowledge in Computer Science.

- a. To minimize the risk of facing a low enrollment perspective, we will place the program in Davie Campus of FAU, where we do not have a CS program that meets the needs of the fast growth tech industry in the area (<https://techlauderdale.org/>). Placing the Professional BSCS program in the Davie Campus will give FAU a strategic advantage by providing an opportunity to second BS students who otherwise may choose FIU or U. Miami to pursue BS degrees in CS or choose a coding bootcamp.
- b. The Professional BSCS program places students in cohorts with combined online and live lectures. The live lectures are offered in the evenings and weekends for the convenience of working professionals. The cohort arrangement cultivates close relationships among the students, which will help student retention and graduation.
- c. Once the program is approved, we will launch a strong market campaign with a combination of traditional and social media blasts. A major partner for this campaign is state colleges, which graduate thousands of students every year, including a substantial number of students with Bachelor degrees, who are working in South Florida. We will also visit companies in the area to tout the new program to their employees.

Table 1 BSCS Degrees Awarded in Florida Institutions

(Hanover Research: <https://hanoverresearch.secure.force.com/>)

Rank	Institution	2013-2017 BSCS Degrees Awarded	2013-2017 Growth Rate
1	University of Central Florida	1,563	14.9%
2	Florida State University	1,388	11.3%
3	Florida International University	1,300	15.6%
4	University of South Florida	869	10.8%
5	Florida Atlantic University	544	13.3%
6	University of West Florida	474	6.6%
7	University of Florida	380	91.1%
8	Berry University	305	-17.2%
9	University of Miami	251	19.4%
10	Florida A&M University	192	9.3%
11	Florida Institute of Technology	126	9.7%
12	Nova Southeastern University	93	-13.9%

Table 2 BSCS Degrees Awarded Recent Years in FAU
(FAU IEA Dashboards)

Year	Number of BSCS Degrees Awarded
2012-2013	87.5
2013-2014	91.5
2014-2015	89
2015-2016	129
2016-2017	145
2017-2018	137
2018-2019	146.5

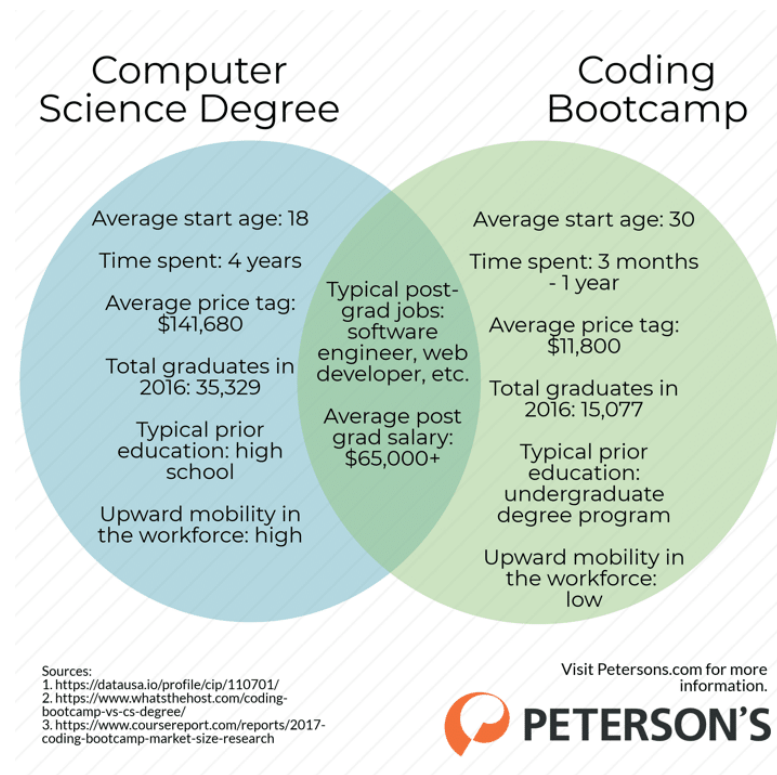


Figure 1 BSCS Degree vs Bootcamp

(<https://www.petersons.com/blog/computer-science-degree-v-coding-bootcamp/>)