# 3D Printing – University Business Incubators and R&D Tax Credits

by Charles Goulding | May 2017 | 3D Printing, Business, Education |

Throughout the US, universities are creating 3D printing incubators to enable students and faculty members to create 3D printing based-businesses. Both engineering and business students are able to integrate their knowledge in developing advanced ideas within these business incubators. 3D printers enable student entrepreneurs to visualize, experiment, design and create a prototype based on their business ideas.

The university 3D incubator participating companies are entitled to a Federal and State R&D tax credits to further assist the commercialization of their ideas.

### The Research & Development Tax Credit


Enacted in 1981, the federal Research and Development (R&D) Tax Credit allows a credit of up to 13 percent of eligible spending for new and improved products and processes. Qualified research must meet the following four criteria:

- New or improved products, processes, or software
- Technological in nature
- Elimination of uncertainty
- Process of experimentation

Eligible costs include employee wages, cost of supplies, cost of testing, contract research expenses, and costs associated with developing a patent. On December 18, 2015 President Obama signed the bill making the R&D Tax Credit permanent. Beginning in 2016, the R&D credit can be used to offset Alternative Minimum Tax and startup businesses can utilize the credit against $250,000 per year in payroll taxes.

Some of the largest Universities with 3D business incubators include:

| Universities with 3D Printing Business Incubators | State |
|---|---|
| Auburn University | Alabama |
| Case Western Reserve University | Ohio |
| Fairfield University | Connecticut |

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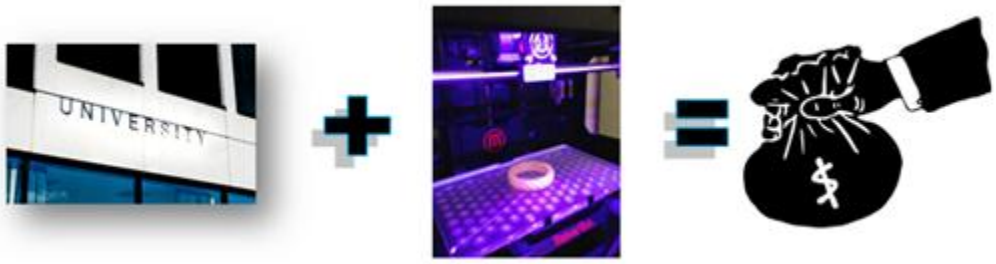
| Florida Institute of Technology | Florida |
| Florida Polytechnic University Innovation Labs | Florida |
| Hampton University | Virginia |
| National Institute of Aerospace | Virginia |
| North Carolina State University | North Carolina |
| Ohio University | Ohio |
| The University City Science | Pennsylvania |
| University of Louisville | Kentucky |
| University of South Florida | Florida |
| University of St. Francis | Illinois |
| University of Texas | Texas |
| University of Utah | Utah |
| Youngstown State University | Ohio |

Among this growing list of schools, Youngstown State University's Business incubator (YBI) is a leader in the 3D incubator race. YBI works to facilitate innovation through collaborative partnerships with large companies in the 3D printing industry. YBI provides two high-end 3D printers that enable research and innovation. The University has developed close relationships with large 3D printing companies, and is researching how technology improvements can contribute to their state-of-the-art additive manufacturing program.




Other schools such as the Florida Institute of Technology have developed a 3D printing incubators to encourage the interaction between highly innovative engineering students with business students. Florida State University (FSU) has contributed funding to the development of an incubator for the promotion of entrepreneurship among students. Entrepreneurial students across the FSU campus are able to utilize rent-free office space to run their start-up business ventures, supported by the developments in 3D printing.

University 3D printing incubators should make sure that the businesses they support utilize R&D Tax Credit Incentives.

R&D Tax Savers

*Charles R. Goulding and Tricia Genova of R&D Tax Savers discuss 3D printing in university incubator settings as it relates to tax credits.*