Education Foundation of Lake County, Inc
2018-19 CTE Grant Application
Deadline to Apply: August 31, 2018

Basic Project Information	
Principal Name:	Dr. Rhonda Boone
School Name:	Mount Dora High School
Teacher Name(s):	Cindy Brisson
CTE Program Name:	Architectural Drafting
Grade levels:	9-12
Number of Students:	115
Number of Participating Teachers:	1
Amount Requested:	$20,330.00

Would you consider this a multi-year project? (*are funds to be used this year that support future efforts and greater impacts to students in subsequent years*) *If so, please outline multiyear goals and expected measurable metrics.*

This grant would enable the students to learn how to use SolidWorks, print objects they have created with a 3-D printer and prepare them for the SolidWorks Industry Certification.

The 3-D printer would be available to the students in the classroom for several years. The students will be more interested in learning the SolidWorks software if they are able to print their design objects.

The measurable goal would be to have 50% of the Drafting students earn an industry certification in SolidWorks.

Project Abstract *(Describe in 200 words or less your project proposal and outcomes to be measured. Think of this as your elevator speech, what would I say about this project and its potential impact?)*

We are training students for jobs in the future. Today the 3-D printer is being used by many different industries. For example the architectural industry is using the 3-D printer to print models of structures. The engineering industry is using the 3-D for printing mechanical prototypes. The art industry is even using the 3-D printer for portraits.

This would be cutting edge technology that can be brought into the classroom to help the students learn the importance of accuracy, design and software programing.

Project Detail

In the space below, please provide a detailed outline of your project activities. Please be sure to include the following: Goals and objectives of your project activities, expected timeline for project activities, when certification exams will be taken, etc.

Goal: To teach students a solid modeling computer-aided design programs that runs on Microsoft Windows and to improve class attendance, teach the students a trade skill, provide the opportunity for students to earn an industry certification and improve the school grade.

Objective: To prepare students for their SolidWorks Industry Certification.

Standards:

09.0 Perform basic computer aided drafting functions.
11.0 Prepare computer aided drawings (CAD).
12.0 Perform computer aided drafting functions.
16.0 Apply three-dimensional modeling concepts.
17.0 Explain three-dimensional modeling.

Time Line:

- September – Teach students SolidWorks
- October and November – Students will work on projects in SolidWorks
- November – Instructor Training on SolidWorks Essentials
- December – Students will complete Part 1 of SolidWorks Industry Certification
- January and February – Students will learn design and object and print the object with the 3-D printer
- March – Students will complete Part 2 of SolidWorks Industry Certification

Outcome Measures

Outcomes ***(change/improvement in knowledge, behavior, skills scores)***

What certifications are offered through this CTE program?
SolidWorks, Autodesk Certified User: AutoCAD

What is your target number of students receiving certifications that you are trying to reach? 115 students

Budget

Please do not submit a budget item that does not fit a category below or one that has not been approved by the EFLC staff. It will only delay the processing of your application.

NO GENERAL ADMINISTRATIVE OR INDIRECT CHARGES MAY BE APPLIED TO THIS GRANT.

Allowable expenditures include: training/conferences, professional and technical services, classroom materials, computer software, computer hardware, other equipment, program supplies, and printing
Non-Allowable expenditures include: administrative expenses, capital improvements, support of interscholastic athletics, refreshments, transportation, food items, decorative items, awards for outstanding service, and the entertainment of dignitaries.

Category of Expenditure	Amount	Category of Expenditure	Related Activity
Professional Contracted Workers (i.e. stipend workers, trainers, work for fee etc.)			
Program supplies			
Computer Software			
Computer Hardware*			
Other Equipment (not computers)	**$18,330.00**	**3-D Printer**	**Student printing of 3-D Designs**
Printing			
Tuition/Training/Conferences/Admission	**$600.00** **$1,400.00**	**Installation and training of 3-D printer** **Instructor Training on Essentials of SolidWorks**	**Student printing of 3-D Designs** **Student Industry Certification**
Room Rental Fees			
TOTALS	**$20,330.00**		

Key Terms:

Category of expenditure *(Short description for categories of expenses)*	**Related Activity** *(What activity does this support in the grant? i.e. classroom project, training, computer project, etc.)*

Program Approved By: _____ and _____ and

Risk Management Operations

_____

CTE Coordinator

(Request must be approved by all three departments before being submitted to the Foundation).

Requesting party has read and agrees with the funding policies of the Educational Foundation.

Principal's Signature: _____ Date: 8/23/2018

Email: _____

To be completed by foundation staff/board

Program meets Foundation Mission/Funding Policy: Yes or No

Visioning Committee Recommendations: _____

Executive Board Recommendations: _____

_____ Approved _____ Denied

_____

President Signature

Date

Please submit the completed application to:
Educational Foundation of Lake County, Inc
2045 Pruitt Street

Leesburg, FL 34748
Or
Email: Cullen-battc@lake.k12.fl.us

- All funds must be used by May 1, 2019. A final program evaluation must be submitted by May 15, 2019.

Technical Training Aids

QUOTE

502 South Phelps Ave
Winter Park, FL 32789
800-851-3987
205-987-7460 (Fax)

Quote # 12317sw3
DATE January 23, 2017

EXPIRATION DATE **90 Days**

TO Cindy Brisson
Mount Dora High School

Scott Weller
(407) 408-6345

ITEM	Quantity	DESCRIPTION	UNIT PRICE	LINE TOTAL
		3 Years material 3 years on-site service/warranty		
680-50306	1	Stratasys Uprint SE 3D printer Grab CAD compatible 3 Year Pk	$18,330.00	$18,330.00
		ABSplus plastic modeling material, Soluble Support Material,		
		3-Year Print Pk - Start Up Supply Kit - 3-Year Warranty		
		1- Material Bay, Model and Support Material Carriers, and		
		CatalystEX software (site license)		
		3 uPrint SE Bonus Education Material Pkgs(Ivory) - includes:		
		10 ea P430XL Model Spool Ivory (42 cu in/688 cc)		
		3 ea SR-30XL Soluble Support Spool (42 cu in/688 cc)		
		2 cases uPrint SE Modeling Bases 8x8 in (203x203 mm)case-24		
		Support Removal System - SCA 1200 with 1-Case Waterworks		
		Concentrate		
100-10001	1	Installation & Training	600.00	-

** yearly supply of material based on average material consumtion from current education customers

Removal of an item gives TTA the option of withdrawing this quote.

SUBTOTAL	$18,330.00
Shipping	$600.00
TOTAL	$18,930.00

uPrint SE

PROVEN. POWERFUL. PROFESSIONAL

Don't settle for anything less.

uPrint SE 3D Printers are powered by Stratasys' patented FDM® (Fused Deposition Modeling™) technology. It's the 3D printer on which thousands of design engineers test their designs.

Its highly advanced, powerful, stable platform is made to work seamlessly with CAD software – and it's the reason no other 3D printer compares with the uPrint SE. Plus, by producing models in house instead of outsourcing to a service bureau, you can keep your most ground-breaking product designs confidential.

Collaborate with your colleagues. Faster. Easier.

What's more powerful: Showing a flat drawing, or a three-dimensional model everyone can hold? Through every design iteration, uPrint SE turns your ideas into strong, functional models ready for collaboration and testing.

uPrint SE 3D Printers build accurate, stable 3D models in ABS*plus* plastic. They're ideal for determining form, fit and function in everything from ergonomics to manufacturing processes. These aren't fragile lab beauties either. ABS*plus* is stronger than materials typically used by competitive 3D printers.

LEARN MORE ABOUT UPRINT SE AT STRATASYS.COM

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THE **3D PRINTING SOLUTIONS** COMPANY

Building 3D models at your desk is as easy as clicking "print".

And, when it's time to test your concepts, ABSplus models stand up to functional testing. You'll get more quality feedback, resulting in a better product. With a footprint of just 635 x 660 mm (25 x 26 in), uPrint SE's ability to produce quick, inexpensive models will help you efficiently review multiple concepts right from your desk.

Easy to use.
Easy on your budget.
Only uPrint SE makes 3D printing so affordable and trouble-free. Outsourcing your prototypes can take days and cost hundreds of dollars. A uPrint SE 3D Printer can create the same prototype in just hours – for a fraction of the cost.

Conquer deadline pressures and speed your projects to conclusion with help from a uPrint SE 3D Print Pack. It's easy to use, affordable, and fits right into your daily workflow.

Whatever your profession – designer, engineer or teacher – there's room on your desk and in your budget for a uPrint SE 3D Printer.

Put the proven, powerful, professional uPrint SE 3D Printer to work in your office.

uPrint SE 3D Print Pack Options

The uPrint SE 3D Print Pack includes everything you need to start making durable, accurate 3D models in ABSplus plastic.

uPrint SE 3D Print Pack

Includes:

- uPrint SE 3D Printer
- WaveWash™ Support Cleaning System
- Start-up Kit*

**Start-up Kit includes one spool of ivory ABSplus modeling material, one spool of support material, EcoWorks™ Cleaning Agent, six modeling bases and more.*

uPrint SE Plus 3D Print Pack

Includes:

- uPrint SE Plus 3D Printer
- WaveWash™ Support Cleaning System
- Start-up Kit*

PLUS the ability to print:

- Larger models
- 30% faster (with .33 mm / .013 in layer thickness)
- In nine colors

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THE **3D PRINTING SOLUTIONS** COMPANY

uPrint SE

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PRODUCT SPECIFICATIONS

Model Material:

uPrint SE: ABSplus in ivory

uPrint SE Plus: ABSplus in ivory, white, blue, fluorescent yellow, black, red, nectarine, olive green, gray

Build Size:

uPrint SE: 203 x 152 x 152 mm (8 x 6 x 6 in)
uPrint SE Plus: 203 x 203 x 152 mm (8 x 8 x 6 in)

Layer Thickness:

uPrint SE: .254 mm (.010 in)
uPrint SE Plus: .254 mm (.010 in) or .330 mm (.013 in)

Workstation Compatibility:

Windows® 7

Network Connectivity:

Ethernet TCP/IP 10/100 base T

Size and Weight:

uPrint SE / SE Plus and one material bay:
635 (w) x 660 (d) x 787 (h) mm
(25 x 26 x 31 in)
76 kg (168 lbs)
uPrint SE / SE Plus and two material bays:
635 (w) x 660 (d) x 940 (h) mm
(25 x 26 x 37 in)
94 kg (206 lbs)
WaveWash Support Cleaning System:
48.33 (w) x 43.18 (d) x 43.85 (h) cm
(18 x 17 x 17 in), 16.4 kg (36 lbs)
Basket size: 203 x 203 x 152 mm (8 x 8 x 6 in)

Power Requirements:

uPrintSE / SE Plus: 100–127 VAC 50/60 Hz, minimum 15A dedicated circuit or 220–240 VAC 50/60 Hz, minimum 7A dedicated circuit
WaveWash Support Cleaning System: 100-240 VAC, 50/60Hz 1200W

Regulatory Compliance:

uPrint SE / SE Plus:
CE / TUV / RoHS / WEEE
WaveWash Support Cleaning System:
CE / ETL / RoHS / WEEE

Special Facility Requirements:

uPrint SE / SE Plus: None
WaveWash Support Cleaning System: Standard water source

uPrint SE

PROVEN. POWERFUL. PROFESSIONAL

With uPrint SE 3D Printers, Making Models Is As Easy As 1-2-3.

1. **Prepare the file.** Create your 3D model in CAD software, then click "print." CatalystEX™ software converts your CAD system's STL output into 3D model print paths, including support structures, that guide the uPrint SE 3D Printer extrusion head.
2. **Print your model.** uPrint Printers use FDM Technology™ to build your 3D model and its support material, layer by layer, from the bottom up on a removable modeling base.
3. **Remove supports.** Take your printed model out of the uPrint SE 3D Printer build chamber, pop it off the modeling base and dissolve away the soluble support material using the WaveWash Support Cleaning System.

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E info@stratasys.com / STRATASYS.COM

ISO 9001:2008 Certified

HEADQUARTERS

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Eden Prairie, MN 55344
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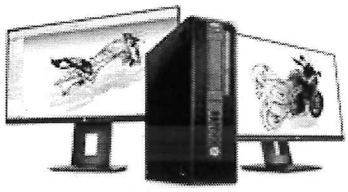
+1 952 937-3000 (Intl)
+1 952 937-0070 (Fax)

2 Holtzman St., Science Park,
PO Box 2496
Rehovot 76124, Israel
+972 74 745 4000
+972 74 745 5000 (Fax)

SOLIDWORKS Essentials Training November 5-8, 2018 (Orlando, FL)



Length: 4 Days

Course Description: SOLIDWORKS Essentials teaches you how to use the SOLIDWORKS mechanical design automation software to build parametric models of parts and assemblies, and how to make drawings of those parts and assemblies.

Topics Covered

- SOLIDWORKS Basics and the User Interface
- Introduction to Sketching
- Basic Part Modeling
- Symmetry and Draft
- Patterning
- Revolved Features
- Shelling and Ribs
- Editing: Design Changes & Repairs
- Configurations
- Using Drawings & Assemblies
- Bottom-Up Assembly Modeling
- MLC CAD Systems Material

View SOLIDWORKS Essentials Syllabus

Event Properties

Event Date	11-05-2018 8:30 am
Event End Date	11-08-2018 5:30 pm
Cut off date	11-05-2018
Individual Price	$1,400.00
Location (Click Link For Map)	MLC Orlando, FL

MLC CAD Systems LLC
941 W. Morse Blvd, Suite 100
Winter Park, FL 32789
866-966-1652 Phone
866-966-0652 Fax