

# APPLIED ROBOTICS

(PROGRAM #9410100)

The Applied Robotics pathway combines both mechanical and electronics engineering. Students completing this program will learn robotics through the use of engineering design and critical thinking processes involving design, functional use, and maintenance. Students are learning transferrable skills that can be applied to the manufacturing, transportation, medical, military, safety, and research sectors.

Students in this pathway will participate in the following Career Technical Student Organization(s) (CTSO).  
SkillsUSA, TSA

## PROFESSIONAL CAREER CERTIFICATIONS\*

Industry Certification Title	CAPE college credits	Graduation online course requirement	Math/Sci Waiver (non-EOC)
Microsoft Office Specialist	3 credits	YES	YES
Autodesk certified user: AutoCAD	3 credits	YES	YES
Autodesk certified user: Inventor	3 credits	YES	YES
Certified SolidWorks Associate (CSWA)	3 credits	YES	YES
RECF Robotics certification	n/a	YES	NO
RECF Pre-engineering certification	n/a	YES	NO

## POST SECONDARY OPTIONS

Options	Pathway	Career**	Avg. Salary**
COLLEGE / UNIVERSITY ENROLLMENT	Engineering BS (multiple fields) Engineering Technology AS	Industrial Engineer Computer Engineer Mechatronics Engineer Robotics Engineer	\$70,326 \$96,831 \$81,336 \$99,563
REGISTERED APPRENTICESHIP	N/A	N/A	N/A
WORKFORCE	Manufacturing Industry	Robotics technician Robot maintenance & repair Welder	\$17.67 / hr \$16.70 / hr \$15.85 / hr

## COLLEGE SCHOLARSHIPS

<p><b>Florida Gold Seal Vocational Scholars (GSV)</b></p> <p>Funds 2-year programs: Technical College certificate or State College degree</p>	<p>The Florida Gold Seal Vocational Scholars (GSV) can be used to fund a career education or certificate program at a Technical or State College.</p> <p>To earn this scholarship students must:</p> <ul style="list-style-type: none"> <li>Complete 3 credits within a single pathway</li> <li>3.0 weighted core GPA &amp; 3.5 unweighted GPA in the pathway courses</li> <li>Minimum college ACT, SAT, or PERT scores</li> </ul> <p>Click here to see the full eligibility requirements: <a href="http://www.floridastudentfinancialaid.org/SSFAD/PDF/BFHandbookChapter1.pdf">www.floridastudentfinancialaid.org/SSFAD/PDF/BFHandbookChapter1.pdf</a></p>
<p><b>Florida Gold Seal CAPE Scholars (GSC)</b></p>	<p>The Florida Gold Seal CAPE Scholars award (GSC) can be used to fund a career education or certificate program.</p> <p>To earn this scholarship students must:</p> <ul style="list-style-type: none"> <li>Pass Industry Certification exam(s) equaling 5 or more college credits</li> <li>Document a minimum of 30 service hours</li> </ul> <p>Click here to see the full GSC eligibility requirements: <a href="http://www.floridastudentfinancialaid.org/SSFAD/PDF/BFHandbookChapter1.pdf">www.floridastudentfinancialaid.org/SSFAD/PDF/BFHandbookChapter1.pdf</a> Click here to see Industry Certification awarded college credits: <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a></p>

## SCHOOLS OFFERING THIS PATHWAY

High Schools:	Dillard 6-12 Hollywood Hills Nova
Middle Schools:	n/a

## COURSE PROGRESSION

Course	Course #	Teacher Certification
Foundations of Robotics	9410110	Tech Education
Robotic Design Essentials	9410120	*see FLDOE frameworks for complete list
Robotic Systems	9410130	
Robotic Applications Capstone	9410140	

## CAREER PATHWAY OPPORTUNITIES

CTE pathways offer students opportunities to continue their education after high school. Dual Enrollment pertains to students taking college courses while enrolled in high school. Articulation agreements allow students to earn college credit for CTE courses and industry certifications earned in high school.

<b>Workplace Experience</b>	CTE students have the opportunity to complete a pre-professional learning experience the summer after 11 <sup>th</sup> grade in their chosen field of study or career interest. <a href="http://www.academics.browardschools.com/CTACE">www.academics.browardschools.com/CTACE</a>
<b>Broward Technical Colleges</b>	Students who have passed courses in a high school CTE program or earned an Industry Certification can apply those credits to the aligned postsecondary program. Contact a BTC Counselor for more information or follow the link to see how you can save time and money when you attend a Broward Technical College. <a href="http://www.browardtechnicalcolleges.com/articulation-agreement">http://www.browardtechnicalcolleges.com/articulation-agreement</a>
<b>Broward College</b>	Students who complete a CTE pathway or earn an Industry Certification that aligns with Broward College's Associate of Science degree programs can earn FREE college credit. <a href="http://www.broward.edu/academics/cpl/pages/high-school.aspx">www.broward.edu/academics/cpl/pages/high-school.aspx</a>

\*Industry certifications offered may vary by school.

\*\*Salary data collected from Indeed.com, 04/2017

## CONTACT INFORMATION

**Broward County Public Schools: Career, Technical, Adult and Community Education**  
754-321-8400 [www.BrowardSchools.com](http://www.BrowardSchools.com) [CTACE@BrowardSchools.com](mailto:CTACE@BrowardSchools.com)

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