BERKS COUNTY TECHNICAL ACADEMY
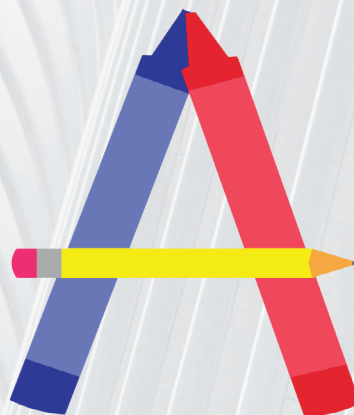
TEACHER Academy

CHOOSE YOUR PATH

START EARNING AN ASSOCIATE DEGREE WHILE STILL IN HIGH SCHOOL

START WORKING IN A HIGH DEMAND JOB

MOVE ON TO EARN YOUR BACHELOR'S DEGREE

A COLLABORATION BETWEEN
BERKS CAREER & TECHNOLOGY CENTER
READING AREA COMMUNITY COLLEGE
READING MUHLENBERG CAREER & TECHNOLOGY CENTER

HOW THE TECHNICAL ACADEMY WORKS:

start earning an ASSOCIATE DEGREE while still in high school!

The estimated cost of one-year tuition at RACC as compared to other schools in Berks County.

Reading Area Community College
$5,820

Berks County PASSHE University
$11,000

Berks County State-related University
$15,000

Berks County Private Colleges
$40,000

- The Technical Academy and Teacher Academy enrollment period occurs at the beginning of the high school year. A RACC representative will assist students at the Career & Technology Center (CTC) with applying to RACC and registering for the courses to be completed by the student within the academic year.

- Students need to meet with their CTC counselor about specific financial responsibility for Academy courses, including financial hardship.

- The college credits earned while at the CTC in the student's sophomore and junior year will be **tuition free** if the student immediately attends RACC to complete their associate degree.

- Tuition and textbooks for the senior year courses taken at RACC's campus or online while students are still in high school may be subsidized by alternative funding sources and is dependent on benefactor, state, and federal funding.

- After students complete their associate degree, they can transfer to a bachelor's degree program. Students have transferred RACC credit to more than 780 institutions.

- Once students graduate from high school, the costs associated with the remaining courses will be the responsibility of the student. Students may apply for financial aid in the same fashion as any other RACC student.

TO LEARN MORE ABOUT WHAT OUR TECHNICAL ACADEMY PROGRAMS PROVIDE:

BCTC Students:
Contact Student Services
610-374-4073 / www.berkscareer.com

RMCTC Students:
Contact Student Services
610-921-7310 / www.rmctc.org

racc.edu

BERKS COUNTY TECHNICAL ACADEMY

The Technical Academy provides college-bound students with the opportunity to develop advanced technical skills and earn college credit toward an associate and/or bachelor's degree while still in high school.

student **entrance** requirements

- Students must be in grades 10 or 11.

- 3.0 overall GPA
  (With special permission a student may be accepted on a provisional basis with a 2.5 GPA or higher.)

- Math Proficiency

- Reading Proficiency

- To remain in the Academy, students must complete a college prep academic sequence throughout high school.

- A signed Letter of Understanding to attend RACC to earn an associate degree must be on file.

- Students transitioning to RACC after graduation and completion of the Technical Academy courses will be required to complete RACC's placement assessment. SAT, ACT, and AP scores may be evaluated to determine the need to take RACC's placement assessment.

EARN COLLEGE CREDITS

Start your Associate in Applied Science (AAS) degree at RMCTC or BCTC and complete it at RACC.
Secure employment, use your industry certification, or transfer to a bachelor's degree program.

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business management

BCTC's Business Management & Entrepreneurship

COURSE#		COURSE NAME	CREDITS
College Courses Offered at BCTC / RMCTC			
BUS-100		Introduction to Business	3
IFT-110		Microcomputer Apps	3
BUS-110		Business Math	3
ACC-105		Financial Accounting	3
MGT-100		Principles of Management	3
BUS-220		Principles of Marketing	3
High School Senior Year Capstone Courses at RACC			
ACC-110		Managerial Accounting	3
CSS-103		College Success Strategies	3
MGT-215		Human Relations in Business	3
Program Courses to Complete Associate Degree (after graduation)			
MGT-230		Small Business Management	3
BUS-200 BUS-201		Macroeconomics **OR** Microeconomics	3
MGT-200		Human Resource Management	3
BUS-230		Business Law	3
MGT-210		Supervisory Management	3
BUS-240		International Business or	
ACC-210		Financial Management	3
ENV-130		The Environment	3
Required General Education Courses			
COM-121		English Composition I	3
BUS-106		Business Communications	3
Select 1 Course from each subject area: Humanities, Sciences, and Social Sciences			9

Students are prepared for employment as office managers, assistant managers, sales representatives, entrepreneurs, supervisors, human resource employees, benefits coordinators, market researchers, and management trainees in programs such as those operated by banks, retail establishments, and other business and industrial enterprises. Students earn up to 27 credits while in high school.

JOBS			
Marketing Specialist	$34,230	$55,770	$66,540
Human Resource Specialist	$39,080	$64,790	$77,650
Accountants & Auditors	$49,640	$69,250	$79,050

TECHNICAL ACADEMY CAREER PATHWAYS

computer technology

BCTC's Computer Systems Networking & Security

College Courses Offered at BCTC / RMCTC

COURSE#	COURSE NAME		CREDITS
IFT-100	Introduction to Information Technology		3
NET-100	Computer Networking		3
NET-106	Installation & Maintenance of PCs I		3
NET-120	Server Administration		3
NET-206	Installation of PCs II		3
NET-250	Network Security		3

High School Senior Year Capstone at RACC

MGT-215	Human Relations in Business	3
CSS-103	College Success Strategies	3
IFT-110	Microcomputer Apps	3

Program Courses to Complete Associate Degree (after graduation)

BUS 100	Introduction to Business	3
IFT-210	Help Desk Computer Support	3
PRG-260	Database Systems	3
WEB-100	Web Design I (HTML)	3
PRG-100	Introduction to Programming	3
ENV-130	The Environment	3

Required General Education Courses

COM-121	English Composition I	3
BUS-106	Business Communications	3
MAT-150	Foundations of Math	3
Select 1 Course from each subject area: Humanities, Sciences, and Social Sciences		9

Students are prepared for supporting others in the use of computer hardware, software, networks and websites. Coursework will prepare students for various industry-standard certification exams. Students in the Computer Technology Academy will need to meet with a CTC counselor to select courses for their individual career pathway. Students earn up to 27 credits taken while in high school.

= JOBS

Computer User Support Specialist	$35,760	$48,300	$54,570
Computer Network Support Spec.	$48,140	$67,030	$76,480
Network & Computer Systems Administrator	$47,330	$71,040	$107,930

computer technology

BCTC's IT-Programming

College Courses Offered at BCTC

COURSE#	COURSE NAME		CREDITS
IFT-100	Introduction to Information Systems		3
PRG-100	Introduction to Computer Programming		3
WEB-100	Web Design I		3
PRG-260	Database Systems		3
IFT-110	Microcomputer Applications		3
IFT-120	Advanced Microcomputer Applications		3

High School Senior Year Capstone at RACC

CSS-103	College Success Strategies	3
MGT-215	Human Relationships in Business	3
BUS-100	Introduction to Business	3

Program Courses to Complete Associate Degree (after graduation)

IFT-210	Help Desk Customer Support	3
NET-100	Computer Networking	3
NET-106	Installation & Maintenance of PCs I	3
NET-250	Network Security	3
NET-206	Installation & Maintenance of PCs II	3
NET-120	Server Administration	3
ENV-130	The Environment	3

Required General Education Courses

COM121	English Composition I	3
BUS-106	Business Communications	3
MAT-150	Foundations of Math	3
Select 1 Course from each subject area: Humanities, Sciences, and Social Sciences		9

Students are prepared for supporting others in the use of computer hardware, software, networks and websites. Coursework will prepare students for various industry-standard certification exams. Students in the Computer Technology Academy will need to meet with a CTC counselor to select courses for their individual career pathway. Students earn up to 27 credits taken while in high school.

= JOBS

Computer Programmer	$50,750	$90,980	$150,520
Computer Systems Analysts	$56,990	$88,640	$104,470
Web Developer	$33,800	$63,620	$103,600

web site development

mechatronics engineering technology

RMCTC's IT Web Design

College Courses Offered at BCTC / RMCTC

COURSE#	COURSE NAME		CREDITS
IFT-100	Introduction to Information Technology		3
IFT-110	Microcomputer Apps		3
WEB-100	Web Design I (HTML)		3
PRG-100	Introduction to Programming		3
BUS-100	Introduction to Business		3

High School Senior Capstone at RACC

WEB-115	Web Design II – Web Authoring Software	3
CSS-103	College Success Strategies	3
MGT-215	Human Relations in Business	3

Program Courses to Complete Associate Degree (after graduation)

BUS 105	Business English	3
WEB-230	Web Databases	3
WEB-225	Multimedia for the Web	3
WEB-240	Responsive Design	3
BUS-220	Principles of Marketing	3
WEB-200	E-Commerce	3
NET-100	Computer Networking	3
WEB-215	Web Design Graphics	3
PRG-160	JavaScript	3
ENV-130	The Environment	3

Required General Education Courses

COM-121	English Composition I	3
BUS- 106	Business Communications	3
MAT-150	Foundations of Math	3
	Select 1 Course from each subject area: Humanities, Sciences, and Social Sciences	9

Students are prepared for careers in website design, creation and implementation. They will also be able to maintain a web server. Students earn up to 24 credits while in high school.

JOBS			
Web Designers	$36,000	$51,424	$75,000
Web Developer	$33,800	$63,620	$103,600
Search Marketing Strategist	$35,430	$55,420	$91,440
Web Administrator	$41,050	$78,350	$128,080

BCTC's Mechatronics Engineering Technology RMCTC's Engineering and Automation Technology

College Courses Offered at BCTC / RMCTC

COURSE#	COURSE NAME		CREDITS
MET-101	Fundamentals of Shop Machinery		3
MET-120	Industrial Mechanics I		5
MET-130	Industrial Electrical Systems		4
MET-140A	Intro to Programmable Logic Controllers I		2

High School Senior Capstone Courses at the Schmidt Training and Technology Center

MET-140B	Intro to Programmable logic Controllers II	2
MET-150	Industrial Mechanics II	6
MET-160	Rotating Electrical Machines	3

Program Courses to Complete Associate Degree (after graduation)

MET-200	Robotics and Motion Control	4
MET-210	Process Control & Instrumentation	3
MET-220	Advanced PLCs (AB ControlLogix 5500 or Siemens S7)	4
MET-240	Mechatronics Application Project	3
MET-111	Fundamentals of Manufacturing	1

Required General Education Courses

CSS-103	College Success Strategies	3
COM-121	English Composition I	3
COM-141	Technical Writing	3
IFT-110	Microcomputer Apps	3
MAT-160	College Algebra	3
HUM Elective	ART-111 or 201, COM-110, ENG-125, PHI-271 or PHI-275	3
PHY-240	Physics I	4
STEM Elective	BIO-150, CHE-150, or PHY-245	3
SOC-130	Sociology	3

Students are prepared for careers as engineering technicians in diversified manufacturing. Emphasis is placed on predictive maintenance, troubleshooting and quality assurance. Capstone year students will be advised by the RACC Career Coach into the Schmidt Training and Technology lab courses. Students can earn up to 25 credits.

JOBS			
Electrical and Electronics Eng. Technologists & Technicians	$22,970	$47,680	$60,040
Electro-Mechanical Techs	$37,350	$59,800	$95,340
Industrial Engineering Technologists & Technicians	$41,560	$51,750	$56,840

ASSOCIATE OF SCIENCE IN
Engineering

AS Engineering Pathway

College Courses Offered at BCTC / RMCTC

COURSE #	COURSE NAME		CREDITS
MET-101	Fundamentals of Shop Machinery		3
MET-120	Industrial Mechanics I		5
MET-130	Industrial Electrical Systems		4
MET-140A	Intro to Programmable Logic Controllers I		2
MET-140B	Introduction to PLCs II*		2
EGR-104	Introduction to Engineering Design*		3
EGR-110	Programming for Engineers (with MATLAB)*		3
CSS-103	College Success Strategies*		3

*Students may take these courses at RACC in the 12th grade

Program Courses to Complete Associate Degree (after graduation)

MAT 282	Ordinary and Partial Differential Equations	4
MAT 222	Calculus III	4
PHY 255	College Physics II	4

Required General Education Courses

MAT 220	Calculus I	4
CHE 150	Chemistry I	4
COM 121	English Composition I	3
MAT 221	Calculus II	4
PHY 250	College Physics I	4
COM 141	Technical Writing	3
COM 151	Fundamentals of Speech	3
COM 141	Technical Writing	3
COM 151	Fundamentals of Speech	3
PHI 275	Introduction to Ethics	3
BUS 200 / BUS 201	Microeconomics / Macroeconomics	3

Electives

BIO 150	Biology I	4
BIO 155	Biology II	4
CHE 155	Chemistry II	4
CHE 250	Organic Chemistry	4
EGR 102	Shop Machinery and Engineering Graphics	3

Reading Area Community College's Engineering program prepares students to transfer to a four-year institution and earn a Bachelor of Science in Engineering in a variety of disciplines.

Engineers design and build everything from microchips and batteries to machinery, medical equipment, roads, bridges and tunnels, skyscrapers, airports, oil refineries and water and waste systems. All of these involve solving problems and thinking logically to bring complex systems together.

In our engineering program, students will learn how to collect, analyze and interpret data, and then apply scientific and mathematical principles to formulate solutions to challenging design problems.

Students graduating from high school will be encouraged by CTC and RACC counselors, advisors and faculty to continue their engineering associate degree program at RACC. On completing the associate degree, students will be able to continue their education by transferring to a four-year bachelor's degree-granting university or enter the workforce.

Graduates of the AS in Engineering are able to transfer to the BS in Engineering in Electrical-Mechanical Engineering or Mechanical Engineering at Pennsylvania State University - Berks Campus. MET 101 is not included in PSU-Berks program; however, it is included in other RACC partnership programs. Students also have opportunities at a number of Berks County high schools to complete Calculus I (MAT 220 through dual enrollment), and Calculus II (MAT 221).

Here are some examples of occupations related to this program. Some careers may require additional education or training.

JOBS		Est. Median Salary
	Chemical Engineer	$106,000
	Civil Engineer	$75,000
	Computer Systems Engineer	$90,000
	Electrical Engineer	$97,000
	Mechanical Engineer	$68,000

Source: CareerExplorer

associate of science in engineering

BERKS COUNTY TECHNICAL ACADEMY ➡ **RACC ENGINEERING** ➡ **ELECTRICAL-MECHANICAL ENGINEERING OR MECHANICAL ENGINEERING**

ASSOCIATE DEGREE BACHELOR'S DEGREE

ASSOCIATE OF
APPLIED SCIENCE IN
EARLY CHILDHOOD EDUCATION
EDUCATION

TEACHER
Academy

EARLY CHILDHOOD EDUCATION
RACC
ASSOCIATE DEGREE

KUTZTOWN UNIVERSITY
BACHELOR'S DEGREE

Early Childhood Education

ASSOCIATE OF APPLIED SCIENCE IN

The Teacher Academy is a college-credit career pathway where students will be able to begin their Associate of Applied Science in Early Childhood Education (ECE) while still in high school. Some of the classes are taught at the Berks Career and Technology Center, others will be offered as Dual Enrollment or Early College. Students may be able to complete their AAS in Early Childhood Teaching in about a year after graduating from high school before seamlessly transitioning to Kutztown University's BSED (PreK-4 Certification) program offered right at RACC's campus.

RACC's Early Childhood Teaching (PreK-Grade 4) program is designed to prepare graduates for immediate employment in the ECE field as well as provide the first 61 credits of the bachelor's degree leading to PreK-Grade 4 Teacher certification. Graduates of this program may seek employment opportunities with Head Start and early childhood programs serving infants, toddlers, pre-schoolers, and school-aged children. In addition, graduates may also seek employment as educational assistants or paraeducators in public and private schools.

AAS Early Childhood Education Pathway

Courses offered while attending CTC

COURSE #	COURSE NAME		CREDITS
ECE105	EC Professional (at CTC)		3
ECE140	Health, Safety & PE (at CTC)		3
ECE115	Integrated Arts (at CTC)		3
ECE125	Intro to ECE*		3
ECE120	Observation & Assessment*		3
MAT150	Foundations of Math*		3
ENG125	Intro to Literature*		3
IFT110	Micro Comp Apps*		3
CSS103	College Success Strategies*		3

*offered as Early College

Courses to complete post high school
RACC AS Early Childhood Teaching (PreK-4)

SUMMER	SPE100	Intro to Special Education	3
	MAT155	Foundations of Math II	3
		• Take DEV classes if needed/Boot Camp	
		• Take PAPA or Praxis for math	
FALL	COM121	English Comp I	3
	ECE220	Curric Dev & Inst Materials	3
	ECE222	Emerging Literacy	3
	ECE180	Math Found for Toddlers through Grade 1	3
	PSY130	General Psychology	3
SPRING	ECE260	ECE Practicum	3
	COM151	Found of Speech (online)	3
	ECE261	Family & School Relations	3
	PSY210	Child Psychology	3
	BIO120	Biological Concepts	4
	Credits while at RACC		37

Kutztown University Courses

First Year Fall/Winter/Spring

COURSE#	COURSE NAME	
EEU300	Early Literacy Dev	
EEU325	Assessment II	
ELU353	Language Dev, Reading Assess & Intervention	
EEU305	Teaching Science Early Childhood	
SPU314	Effective Instructional Strategies	
SPU316	Literacy Dev Core & Intervention	
EEU220	Children's Literature for Pre-K-4	
EEU211	Family Collaboration & Diversity	
ELU325	Differentiated Instruction	

First Year Summer Courses

	Two RACC Electives

Second Year Fall/Winter/Spring

EEU301	Pro-Sem Teaching Literacy in Grades 2-4
EEU303	Pro-Sem Lang, Dev & Teaching Lang Arts in Pre-K-4
EEU304	Pro-Sem Teaching Social Studies in Pre-K-4
EEU306	Pro-Sem Integrating Principles of Learning in Pre-K-4
EEU309	Pro-Sem Teaching Math in Grades 2-4
EEU390	Clinical Experience I
EEU391	Clinical Experience II

= JOBS

	Median Salary
Pre-school/Childcare Group Supervisor/Teacher (Qualified at AAS Degree)	$31,930
Elementary Teacher (Qualified at BS Degree with State Certification)	$59,400
Para Educator/ Assistant Teacher/ Teacher Aid in K-12 public schools	$28,900
Child Care Program Director/Administrator	$49,160

Obtained from: US Bureau of Labor Statistics Occupational Handbook

DUAL ADMISSIONS AND TRANSFER AGREEMENTS

After completing an associate degree, students can transfer to a college or university to attain a bachelor's degree. Benefits of transfer agreements include advising guides to help students take courses that count toward their bachelor's degree program and generous transfer scholarships. RACC's transfer service office has many resources to help students successfully navigate the transfer process.

TOP 10
TRANSFER SCHOOLS

Albright College • Alvernia University Bloomsburg University, • Kutztown University • Millersville University Penn State University • University of Pittsburgh • Reading Hospital School of Health Science • Temple University • West Chester University

- RACC's 26 transfer partnerships allow our students to earn a bachelor's degree at a fraction of the total cost of a 4-year degree program.

- The Technical and Teacher Academy programs are for students who are interested in earning a college degree without extensive debt, a technical school certificate, and in some programs, industry certification.

Students have transferred RACC credit to more than

780+
INSTITUTIONS

BERKS COUNTY TECHNICAL ACADEMY → **ASSOCIATE DEGREE** → **BACHELOR'S DEGREE**