



Marine Academy of Technology and Environmental Science - 2025 Information Packet





Note to students interested in attending the Marine Academy of Technology and Environmental Science

Academy applications are made available to students attending the academy admission information sessions only.

The academy admission information session is designed to help students and their families make informed decisions regarding an educational pathway that is in the best interest of each student.

The academy approach to learning is different from the traditional high school setting and the decision to apply should be made after review and discussion of the material presented during the information session.





APPLICATION PROCEDURES

1. You may apply to only one academy. You may attend as many information sessions as you like to help you decide which school is right for you.
2. Academy applications and admission materials can be accessed by attending one of the information sessions.
3. Complete the required application online. 7th grade final report card and 8th grade first marking period report card will be requested from your home school.
4. All applications **MUST** be submitted online by midnight on December 11, 2025.
5. Take the admissions test on **January 17, 2026**.

Acceptance Criteria

Applicants will be ranked using the following criteria:

- A) Academic grades 7th grade
 8th grade (first marking period)

- B) Admissions Exam



FREQUENTLY ASKED QUESTIONS

Q. What must be included with my application?

A. The application must be completely filled out. Grade transcripts compiled from 7th grade and the first marking period of 8th grade will be requested from the students' home school. The deadline for applications will be December 11, 2025. It is the applicant's responsibility to make sure that the application is submitted on or before the deadline. Late applications WILL NOT be accepted.

Q. How competitive is the admissions process?

A. In general, there will be more applicants than available space. We assign scores to all applicants based on academic records and performance on our entrance exam.

Q. What happens if I am not accepted?

A. If you are not accepted but you meet the minimum criteria, your application will remain on file. Should an opening occur, your application may be reconsidered.

Q. What is on the entrance exam?

A. The exam contains three sections: mathematics, science and language arts literacy. Questions are multiple-choice.

Q. What if I am sick and miss the exam?

A. A make-up date will be available for the exam, based on the circumstances of the individual.

Q. How and when will I be notified of acceptance?

A. It will take approximately four weeks for all processing to be completed after the audition date. All applicants who have completed the admissions process will be notified by mail whether they have been accepted or not.

Q. Can I apply to more than one Career Academy?

A. No, you may only apply to one school. The Career Academies offer very specialized curricula. The Career Academies admissions process attempts to match students to the most appropriate program for that student. One of the first steps in that process is for you to choose the school that most fulfills your interests and abilities.

Q. How will I make arrangements for transportation and other costs?

A. The Ocean County Vocational Technical School District is a public school district. If you have been accepted, your resident school district will be notified and transportation will be provided by that district. You can expect to incur the same kinds of costs that you would in your resident school. Notebooks, pens, pencils, etc. are your responsibility to provide.



INFORMATION FOR APPLICANTS

The Marine Academy of Technology and Environmental Science is a public high school administered by the Ocean County Vocational Technical School district. MATES is designed to give its students a rigorous academic curriculum with concentration in the areas of math, science, engineering and technology. The school exists within the community to provide a challenging, unique, hands-on learning experience for students interested in pursuing a math or science related career. The academy opened in September 2001 for students entering the ninth grade.

STUDENT SELECTION AND ADMISSION

Students are selected through a competitive application process and enter at the ninth grade level. Applicants must reside in Ocean County to be eligible for admission. All school districts in Ocean County are eligible to participate in sending applications to the program.

ADMISSION

To be eligible for admission the student should be enrolled in and successfully complete an eighth grade program that includes: English, math (Algebra I preferred), science, social studies and physical education. *A Spanish I elective is also recommended, or a summer program equivalency will be required.

NINTH GRADE COURSES OF STUDIES

Algebra I /Data Analysis	5 credits
Geometry	5 credits
English I	5 credits
Biology	5 credits
Chemistry I	5 credits
*Spanish II	5 credits
World History	5 credits
Physical Education/Health	5 credits
Independent Research Study	5 credits

TRANSPORTATION

The student's resident district will be responsible for transporting the student to MATES.

PROGRAM DESCRIPTION

The school day runs from 7:30AM until 1:43PM. Classes are offered in a block time similar to a typical college program. Each semester students receive a different schedule. The course of study meets and exceeds the New Jersey Student Learning standards.



Marine Academy of Technology and Environmental Science (MATES)

The mission of the Marine Academy of Technology and Environmental Science (MATES) is to provide an opportunity to students in Ocean County to become critical thinkers and problem solvers. Students of this academy will participate in an intimate, integrated, and challenging curriculum with a focus on marine and environmental science. MATES will empower its students with skills important to post-secondary study and employment in a global community.

BACKGROUND

The Marine Academy of Technology and Environmental Science is one of the career academies administered by the Ocean County Vocational Technical School District. Opened in September 2001, the school exists within the community to provide a unique, nurturing, and challenging hands-on learning experience for college bound and career-oriented students interested in pursuing a math or science-related field. MATES has been designed to give its students a rigorous academic curriculum with concentration in the areas of math, science, engineering and technology.

Located in Manahawkin, New Jersey, MATES is centrally located to the south of New York City, north of Atlantic City, and east of Philadelphia.

The Ocean County Vocational Technical School District is responsible for recruitment, admissions, and the instructional program. There are over 21,000 high school students enrolled in Ocean County Public Schools. MATES is a competitive, specialized high school that selects its students from applicants found within the public and private schools of Ocean County.

QUICK FACTS:

Type of School: Public

Grades Included: 9-12

Total Enrollment: 270 (as of September 2025)

CEEB Code: 311473



Marine Academy of Technology and Environmental Science

COURSE OF STUDY

All courses are instructed utilizing a block scheduling format ~ Classes are 80 minutes. All students are accepted via a competitive application process and follow the same rigorous course of study. Students must successfully complete 161.25 high school credits or their college equivalent to graduate. All high school courses are taught at an honors/advanced level.

FRESHMAN YEAR	CREDIT(S)	JUNIOR YEAR	CREDIT(S)
English I	5	English III	5
Algebra I/ Data Analysis	5	Pre-Calculus	5
Geometry	5	Biotechnology (BIOL 1200)	5
Chemistry I	5	Physics (PHYS 2110/2120)	5
Biology	5	*Fall Elective	5
Physical Education I/Health I	5	*Spring Elective	5
World History	5	US History I	5
Spanish II	5	Physical Education III/Health III	3.75
Independent Research Study*		Financial Literacy	2.5
*Part of science program requirement		TOTAL:	41.25
TOTAL:	40		

SOPHOMORE YEAR	CREDIT(S)	SENIOR YEAR	CREDIT(S)
English II	5	English IV (LIT1100/1110)	5
Intro to Computer Science	5	Calculus I (MATH 2215)	5
Algebra II/Trigonometry	5	US History II	5
Chemistry II	5	Oceanography (MARS 1300) or	
Aquatic Ecology or		Adv. Oceanographic Research (MARS 1300)	5
Research Method I/Field Ecology	5	Environmental Science (ENVL 1100) or	
Spanish III	5	Senior CS Capstone	5
Spanish IV (LANG 2142) or		Data Visualization with Python or	
Intro to Art (required or Option II Art)	5	Data Science	5
Health II/Driver's Education	1.25	*Elective	5
Physical Education II	3.75	Physical Education IV/ Health IV	5
TOTAL:	40	Total:	40

*Electives: Geographic Information Systems (GNM 1242); Geo/Astrophysics (GEOL 2120); Art History/Basic Drawing (GAH 2243/GAH 1261); Introduction to Art; Spanish IV (LANG 2142); Spanish V (LANG 2143); Anatomy & Physiology (BIOL 1260); Data Visualization with Python; BioStatistics (CIST 1206); Public Speaking (GEN 2105); Intro to Engineering Design; Principles of Engineering

ALL COURSES SUBJECT TO CHANGE.

MATES CLASS OF 2025 SAT RESULTS

Math: 681

Evidence Reading
& Writing: 693

State% (2025): 510

State% (2025): 525

National % (2025): 532

National % (2025): 553





Marine Academy of Technology and Environmental Science

Graduates of MATES have been offered acceptances to the following institutions:

American University

Boston College

Boston University

Brown University

Bucknell University

University of California at Berkeley

California Institute of Technology

Carnegie Mellon University

Case Western Reserve University

The Catholic University of America

University of Chicago

The Citadel, The Military College
of South Carolina

Clemson University

The College of New Jersey

The College of William & Mary

Columbia University

University of Connecticut

Cornell University

University of Delaware

Dartmouth College

Drew University

Drexel University

Duke University

Embry-Riddle University

Emory University

Florida Institute of Technology

Florida State University

Fordham University

Franklin and Marshall College

The George Washington University

Georgetown University

Georgia Institute of Technology

Harvard University

University of Illinois at Urbana-Champaign

Johns Hopkins University

The Julliard School

Lafayette College

Lehigh University

University of Maryland

Massachusetts Institute of Technology

University of Massachusetts

University of Miami

Monmouth University

Montclair State University

Muhlenberg University

New Jersey Institute of Technology

New York University

University of North Carolina

North Carolina State University

Northeastern University

Northwestern University

University of Notre Dame

The Ohio State University

University of Pennsylvania

Pennsylvania State University

University of Pittsburgh

Princeton University

Purdue University

Quinnipiac University

Rensselaer Polytechnic University

University of Rhode Island

Rice University

University of Richmond

Rider University

Rochester Institute of Technology

University of Rochester

Rowan University

Rutgers University

Seton Hall University

Stanford University

Stevens Institute of Technology

Stockton University

SUNY College of Environmental Science
and Forestry

SUNY Maritime College

Swarthmore College

Syracuse University

Temple University

Texas A&M University

Tufts University

United States Naval Academy

United States Air Force Academy
United States
Coast Guard Academy

The United States Military Academy at West Point

University of Virginia

Vanderbilt University

Villanova University

Virginia Polytechnic Institute & State University

Wake Forest University

Webb Institute

Worcester Polytechnic Institute

Yale University





Marine Academy of Technology and Environmental Science

MATES Calendar of Events (some examples of events and experiences in a given school year)

- September**
- Island Beach State Park Beach Plum Festival
 - Freshmen field experience week at Sedge Island, Barnegat Bay
- October**
- Fall Coffee House
 - PSAT/NMSOT
 - Clean Ocean Action Fall Beach Sweeps, Seaside Heights
 - Annual Student Summit at Island Beach State Park
 - Mole Day Activities (sophomores)
- November**
- Math League Competitions begin (competition schedule continues through Spring)
 - Robotics Team Competitions begin(competition schedule continues through Spring)
- January**
- After-School Educational Winter Outreach (students in grades 5-8) begins (January - March)
- December**
- Winter Semi-Formal
 - Jenkinson's Aquarium
- February**
- MATES Research Expo
 - Winter Coffee House
- March**
- Jersey Shore Science Fair
- April**
- New Jersey Academy of Science, Annual Meeting, Junior Academy Program
 - Environmental Educator's Roundtable - Lighthouse Camp, Waretown
 - Delaware Valley Science Fair
 - Terrapin Appreciation Week in Jenkinson's Aquarium + (other partners)
- May**
- Chemistry Olympics
 - Annual New Jersey Envirothon Competition
 - Junior/Senior Prom
 - National Honor Society Inductions
 - Ocean Fun Day - New Jersey Marine Sciences Consortium
- June**
- Hatchling Release @ Island Beach State Park
 - Marine Conservation Zone Day Island Beach State Park



Marine Academy of Technology and Environmental Science

STUDENT CLUBS AND ORGANIZATIONS

Art Club
Birding/Environmental
Club(BEAK) Chemistry Olympics
Envirothon
Extra-Curricular Athletics Club
Fishing Club
Focus on the Drive
Games Club
Genders and Sexualities Alliance
Independent Research
Interact Club
Literary Magazine
Math League
Mock Trial
Model UN
National Honor Society
Project Terrapin
Robotics
Science Bowl
SkillsUSA
Spanish Club
Student Government
Yearbook

2024 - 2025 MATES HIGHLIGHTS

- 14 National Merit Commended Scholars
- 2 National Merit Semi-Finalists
- 1 International Science and Engineering Fair (ISEF) Finalist
- Jersey Shore Science Fair - 35 Award Winners
- Delaware Valley Science Fair - 19 Award Winners
- New Jersey Academy of Science - 6 Award Winners
- National Jr. Science & Humanities Symposium - 7 Award Winners
- NJ Southern Jr. Science & Humanities Symposium - 7 Award Winners
- American Junior Academy of Science - 4 Award Winners
- Envirothon - 1st Place Team Overall and Category Wins in Aquatics, Soils, Forestry, Current Issues and Wildlife
- SkillsUSA 1st Place Winner in NJ State Competition, 2 Qualifying Students for National Competition
- Mock Trial 3rd Place Winner in NJ Courtroom Artist Competition



Marine Academy of Technology and Environmental Science

Ocean County Vocational Technical School District

Alison Carroll, Principal

John Wnek, Supervisor

Art

Melissa Hood

English

Mia Dill
Jennifer Hudak
Maryann Minnier

Health/Physical Education

Brian Coen
Melissa Galea

Mathematics

Michael Bixler
Michele Colon
Paul Fennimore
Gerald Luchs
Viktoriya D'Agostino

Science/Technology

Jason Kelsey
Adam Sprague
David Werner
John Wnek
Kelly Kelsey
Brian Jones
Amy Williams

Social Studies

Nikki Ferrigno
Christopher Holland

Spanish

Patty Pachas-Araya
Ruth Wolf

Guidance

Kate Beacham
Julia Giglio-Stork

School Nurse

Marissa Laffan

Administrative Secretary

Christine Gemignani
Kathy Wixted

Custodians

Robert Carella
Dave Morgan
Gino DiGiovanni

Cafeteria

Francine Brookover

Board of County Commissioners

Commissioner John P. Kelly.....Director
Commissioner Frank Sadeghi.....Deputy Director/OCVTS Liaison
Commissioner Robert S. AraceMember/OCVTS Liaison
Commissioner Jennifer Bacchione..... Member
Commissioner Virginia E. Haines.....Member

Board of Education

Stephen ScaturroPresident
Maureen C. Stankowitz.....Vice President
Michael DonahueMember
Susan R. Naples.....Interim Executive County Superintendent/Member
Ronald L. Rosetto.....Member

OCVTS Central Administration

Karen L. Homiek..... Superintendent
Dr. Michael B. Maschi..... Assistant Superintendent
Stephen J. Brennan, CPA.....Business Administrator

OCVTS Administration

John Biscardi..... Principal, Jackson
Alison Carroll..... Principal, MATES
Jeremy Dusza.....Principal, Adult Education
Jennifer Etzkorn.....Vice Principal, Jackson
Gary MacDonald..... Director, Curriculum/Grants
Lauren, Mattei.....Vice Principal, Brick
Christopher Mazur..... Vice Principal, GPAA
Thomas McInerney.....Principal, Waretown
Tierney Meeker..... Principal, GPAA
Melanie Patterson.....Principal, Student/Special Services
Jenna Rosenfeld.....Vice Principal, Toms River
Christine Santasieri..... Principal, Toms River/LPN
Lynn Sauer..... Principal, Brick
Tiffany Seeley..... Principal, ALPS
Dr. Michael Tash.....Principal, Technology
Dr. John Wnek.....Supervisor, MATES



The mission of Ocean County Vocational Technical School is to provide an intensive and immersive educational experience aligned with the current and emerging demands of business, industry, and advanced education. We instill the knowledge, skills, and competencies required for students to experience success in entering the workforce, advancing along a career pathway, and achieving career aspirations.

It is the policy of the Board of Education of Ocean County Vocational Technical School not to discriminate in its technical programs, vocational opportunities, activities, employment practices or admission policies and practices on the basis of race, color, creed, religion, sex, ancestry, national origin, affectional and sexual orientation, disability or social or economic status. Lack of English language skills will not be a deterrent to admission to any program at Ocean County Vocational Technical School.

Inquiries regarding affirmative action, discrimination (including Federal Title IX requirements), sexual harassment or equity should be directed to:
Dr. Michael Maschi, Title IX/Affirmative Action Office, 732.240.6414 (ext. 3318)
Melanie Patterson, Federal Section 504 Officer, 732.473.3100 (ext. 3123)
Melanie Patterson, Americans with Disabilities Officer, 732.473.3100 (ext. 3123)

We are an Equal Opportunity Employer and Educator who fully and actively supports equal access for all people regardless of race, color, religion, gender, age, national origin, veterans status, disability, genetic information or testing, family and medical leave, sexual orientation and gender identification and expression. We prohibit retaliation against individuals who bring forth any complaint, orally or in writing, to the employer or the government, or against any individuals who assist or practice in the investigation of any complaint, or otherwise oppose discrimination.