OCEAN COUNTY VOCATIONAL TECHNICAL SCHOOL

Marine Academy of Technology and Environmental Science
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.
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 obtained at 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, 2023.

5. Take the admissions test on January 20, 2024.

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, 2023. 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.
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 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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra I / Data Analysis</td>
<td>5</td>
</tr>
<tr>
<td>Geometry</td>
<td>5</td>
</tr>
<tr>
<td>English I</td>
<td>5</td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>*Spanish II</td>
<td>5</td>
</tr>
<tr>
<td>World History</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education/Health</td>
<td>5</td>
</tr>
<tr>
<td>Independent Research Study</td>
<td>5</td>
</tr>
</tbody>
</table>

**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.
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, 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 23,000 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: 277 (as of September 2023)
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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English I</td>
<td>5</td>
</tr>
<tr>
<td>Algebra I/ Data Analysis</td>
<td>5</td>
</tr>
<tr>
<td>Geometry</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education I/Health I</td>
<td>5</td>
</tr>
<tr>
<td>World History</td>
<td>5</td>
</tr>
<tr>
<td>Spanish II</td>
<td>5</td>
</tr>
<tr>
<td>Independent Research Study*</td>
<td></td>
</tr>
</tbody>
</table>

*Part of science program requirement

TOTAL: 40

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English III</td>
<td>5</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>5</td>
</tr>
<tr>
<td>Biotechnology (BIOL 1200)</td>
<td>5</td>
</tr>
<tr>
<td>Physics (PHYS 2110/2120)</td>
<td>5</td>
</tr>
<tr>
<td>*Fall Elective</td>
<td>5</td>
</tr>
<tr>
<td>*Spring Elective</td>
<td>5</td>
</tr>
<tr>
<td>US History I</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education III/Health III</td>
<td>3.75</td>
</tr>
<tr>
<td>Financial Literacy</td>
<td>2.5</td>
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</tbody>
</table>

TOTAL: 41.25

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English II</td>
<td>5</td>
</tr>
<tr>
<td>Intro to Computer Science</td>
<td>5</td>
</tr>
<tr>
<td>Algebra II/Trigonometry</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>Aquatic Ecology or Research Method I/Field Ecology</td>
<td>5</td>
</tr>
<tr>
<td>Spanish III</td>
<td>5</td>
</tr>
<tr>
<td>Spanish IV (LANG 2142) or</td>
<td></td>
</tr>
<tr>
<td>Intro to Art (required or Option II Art)</td>
<td>5</td>
</tr>
<tr>
<td>Health II/Driver’s Education</td>
<td>1.25</td>
</tr>
<tr>
<td>Physical Education II</td>
<td>3.75</td>
</tr>
</tbody>
</table>

TOTAL: 40

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English IV (LIT1100/1110)</td>
<td>5</td>
</tr>
<tr>
<td>Calculus I (MATH 2215)</td>
<td>5</td>
</tr>
<tr>
<td>US History II</td>
<td>5</td>
</tr>
<tr>
<td>Oceanography (MARS 1300) or</td>
<td></td>
</tr>
<tr>
<td>Adv. Oceanographic Research (MARS 1300)</td>
<td>5</td>
</tr>
<tr>
<td>Environmental Science (ENVL 1100) or</td>
<td></td>
</tr>
<tr>
<td>Senior CS Capstone</td>
<td>5</td>
</tr>
<tr>
<td>Data Visualization with Python or</td>
<td></td>
</tr>
<tr>
<td>Data Science</td>
<td>5</td>
</tr>
<tr>
<td>*Elective</td>
<td>5</td>
</tr>
<tr>
<td>Physical Education IV/ Health IV</td>
<td>5</td>
</tr>
</tbody>
</table>

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

ALL COURSES SUBJECT TO CHANGE.

MATES CLASS OF 2023 SAT RESULTS

<table>
<thead>
<tr>
<th>Section</th>
<th>State% (2023)</th>
<th>National % (2023)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>711</td>
<td>521</td>
</tr>
<tr>
<td>Evidence Read</td>
<td>669</td>
<td>532</td>
</tr>
<tr>
<td>&amp; Writing</td>
<td>538</td>
<td>529</td>
</tr>
<tr>
<td>State% (2023)</td>
<td>532</td>
<td>National % (2023):529</td>
</tr>
</tbody>
</table>
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
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
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
Swarthmore College
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
University of Virginia
Vanderbilt University
Villanova University
Virginia Polytechnic Institute & State University
Wake Forest University
Webb Institute
Worcester Polytechnic Institute
Yale University
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/NMSQT
- 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
- Spring 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

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

2022 - 2023 MATES HIGHLIGHTS

- 16 National Merit Commended Scholars
- 2 National Merit Finalists
- Rensselaer Polytechnic Institute Medalist - Class of 2023
- Jersey Shore Science Fair - 44 Award Winners
- Delaware Valley Science Fair - 23 Award Winners
- New Jersey Academy of Science - 5 Award Winners
- National Jr. Science & Humanities Symposium - 1 Award Winner
- NJ Southern Jr. Science & Humanities Symposium - 4 Award Winners
- American Junior Academy of Science - 4 Award Winners
- American Jr. Science & Humanities Symposium - 1 Award Winner
- Water Environment Association - Stockholm Water Prize, NJ State Winner
- Envirothon - 1st Place Team Overall and Category Wins in Aquatics, Soils, Forestry, and Current Issues
- 35th Annual NJDEP Mapping Contest - 3 Award Winners
- Mock Trial - 2nd Place in Ocean County
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)
Kevin Dineen, Federal Section 504 Officer, 732.473.3100 (ext. 3123)
Kevin Dineen, 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.