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 information can be obtained through your school guidance counselor. Academy applications and admission materials can be obtained at one of the information sessions, and off of our district website, www.ocvts.org.

3. Complete the required application. Bring the application to your school so that the school portion can be completed and signed by a school official. Support materials MUST be included: grade transcript, standardized test results, etc.

4. Application deadline is December 11. Your application must be postmarked by this date. A completed application should be sent from your school to:

   OCVTS Career Academy Admissions
   131 Bey Lea Road
   Toms River, NJ 08753


Acceptance Criteria
Applicants will be ranked using the following criteria:

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

B) Admissions Exam
Q. **What must be included with my application?**
A. The application must be completely filled out and signed by a parent/guardian and a school official, grade transcripts compiled from 7th grade and the first marking period of 8th grade, and standardized test reports. The postmarked deadline for applications will be December 11. It is the applicant’s responsibility to make sure that the application is in the OCVTSD central office on or before the deadline. Late applications WILL NOT be accepted.

Q. **How competitive is the admissions process, and what are the minimum requirements?**
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 qualify, 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 consists of three sessions: 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. 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. 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 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.

**NINTH GRADE COURSES OF STUDIES**

- Algebra I, or Research and Mathematical Analysis
- Geometry
- English I*
- Biology I
- Chemistry I
- Spanish I or II*
- World History
- Physical Education/Health
- Independent Research Study

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra I, or Research and Mathematical</td>
<td>5</td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td>5</td>
</tr>
<tr>
<td>English I*</td>
<td></td>
</tr>
<tr>
<td>Biology I</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>Spanish I or 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 Core Content Curriculum standards.
MATES COURSEWORK
Science - Each student will complete four years of lab science, some requiring additional fieldwork.

Math - Each student will complete a comprehensive mathematics curriculum.

Students will follow a technology curriculum that complements the math and science curriculum.

College coursework is available for juniors and seniors through Ocean County College and Stockton University.

Marine Academy of Technology and Environmental Science
Admission Information Sessions
195 Cedar Bridge Road, Manahawkin, NJ 08050

Saturday October 19, 10:00AM-2:00PM
Thursday October 24, 6:30PM
Saturday November 16, 10:00AM-2:00PM

Pre-registration is not required

DRIVING DIRECTIONS
Marine Academy of Technology and Environmental Science
195 Cedar Bridge Road, Manahawkin, NJ 08050
609.978.8439

From the Garden State Parkway, North or South
Garden State Parkway to Exit 63, to Route 72 East
(follow Route 72 East directions)

ROUTE 72 EAST DIRECTIONS
Take Route 72 East past the Stafford Square Shopping Center.
Just east of the shopping center you will see signs for Route 9. Take Route 9 North.
After you come around the jug handle, you will be heading north on 9.
Turn left at the second traffic light onto Cedar Bridge Road.
Continue past the Southern Regional School District School Buildings; follow road to the
Ocean County College Southern Education Center.

FROM WEST
Follow Route 72 East directions

FROM PHILADELPHIA AREA
Route 95 South to Walt Whitman Bridge, to 295 North, to exit 34B,
Route 70 East, to Route 72 East (follow Route 72 East directions)
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: 276 (as of September 2019)
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 through a competitive application process and once enrolled, 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 level.

FRESHMAN YEAR CREDIT(S)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English I</td>
<td>5</td>
</tr>
<tr>
<td>Algebra I or Research and Mathematical</td>
<td>5</td>
</tr>
<tr>
<td>Analysis (RMA)</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 I *</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 I or II (testing)</td>
<td>5</td>
</tr>
<tr>
<td>Independent Research Study*</td>
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</tbody>
</table>

*Part of science course requirement

TOTAL: 40

SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>English II</td>
<td>5</td>
</tr>
<tr>
<td>Statistics</td>
<td>5</td>
</tr>
<tr>
<td>Algebra II</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>Aquatic Ecology</td>
<td>5</td>
</tr>
<tr>
<td>Spanish II and III OR</td>
<td>5</td>
</tr>
<tr>
<td>Spanish III and Spanish IV or Research</td>
<td>5</td>
</tr>
<tr>
<td>Methods/Applications</td>
<td></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>
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</table>

TOTAL: 40

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>English III</td>
<td>5</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>5</td>
</tr>
<tr>
<td>EFA/Trigonometry</td>
<td>5</td>
</tr>
<tr>
<td>Biotechnology (OCC BIOL 161)</td>
<td>5</td>
</tr>
<tr>
<td>Physics (OCC PHYS 171/172)</td>
<td>5</td>
</tr>
<tr>
<td><em>Introduction to Art OR Spanish IV OR Spanish V</em></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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</table>

TOTAL: 41.25

*Option II V/PA available as a P/F course in fulfillment of NJDOE requirements

SENIOR YEAR

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>AP Literature and Composition (OCC Eng 151/152)</td>
<td>5</td>
</tr>
<tr>
<td>OCC MATH 265</td>
<td>5</td>
</tr>
<tr>
<td>US History II</td>
<td>5</td>
</tr>
<tr>
<td>Oceanography (SU MARS 2202)</td>
<td>5</td>
</tr>
<tr>
<td>Environmental Science (SU ENVL 1100)</td>
<td>5</td>
</tr>
<tr>
<td>Computer Science or Computer Science with</td>
<td></td>
</tr>
<tr>
<td>Data Analysis</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>
<tr>
<td>Senior Experience: Research/SLE</td>
<td>P/F</td>
</tr>
</tbody>
</table>

Total: 40

ELECTIVES:

*Spanish IV (OCC SPAN 152); Spanish V (OCC SPAN 251); Research Methods/Applications
**Geographic Information Systems (GIS SU GNM 1242); Geo/Astrophysics (SU GEOL 2120); History/Basic Drawing (OCC ARTS 182/183); Spanish V (OCC SPAN 251);

All courses subject to change.

MATES CLASS OF 2018 SAT RESULTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Math</td>
<td>709</td>
<td>551</td>
</tr>
<tr>
<td>Critical Reading</td>
<td>670</td>
<td>552</td>
</tr>
<tr>
<td>Writing</td>
<td>670</td>
<td>552</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>American University</th>
<th>Franklin and Marshall College</th>
<th>Pennsylvania State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston College</td>
<td>The George Washington University</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Boston University</td>
<td>Georgetown University</td>
<td>Princeton University</td>
</tr>
<tr>
<td>Brown University</td>
<td>Harvard University</td>
<td>Purdue University</td>
</tr>
<tr>
<td>Bucknell University</td>
<td>University of Illinois at Urbana-Champaign</td>
<td>Quinnipiac University</td>
</tr>
<tr>
<td>University of California at Berkeley</td>
<td>Johns Hopkins University</td>
<td>Rensselaer Polytechnic University</td>
</tr>
<tr>
<td>Carnegie Mellon University</td>
<td>Lafayette College</td>
<td>University of Rhode Island</td>
</tr>
<tr>
<td>Case Western Reserve University</td>
<td>Lehigh University</td>
<td>Rice University</td>
</tr>
<tr>
<td>The Catholic University of America</td>
<td>University of Maryland</td>
<td>University of Richmond</td>
</tr>
<tr>
<td>The Citadel, The Military College of South Carolina</td>
<td>Massachusetts Institute of Technology</td>
<td>Rider University</td>
</tr>
<tr>
<td>Clemson University</td>
<td>University of Massachusetts</td>
<td>Rochester Institute of Technology</td>
</tr>
<tr>
<td>The College of New Jersey</td>
<td>Monmouth University</td>
<td>University of Rochester</td>
</tr>
<tr>
<td>Columbia University</td>
<td>Montclair State University</td>
<td>Rowan University</td>
</tr>
<tr>
<td>University of Connecticut</td>
<td>Muhlenberg University</td>
<td>Rutgers University</td>
</tr>
<tr>
<td>Cornell University</td>
<td>New Jersey Institute of Technology</td>
<td>Seton Hall University</td>
</tr>
<tr>
<td>University of Delaware</td>
<td>New York University</td>
<td>Stanford University</td>
</tr>
<tr>
<td>Drew University</td>
<td>The University of North Carolina</td>
<td>Stevens Institute of Technology</td>
</tr>
<tr>
<td>Drexel University</td>
<td>North Carolina State University</td>
<td>Stockton University</td>
</tr>
<tr>
<td>Embry-Riddle University</td>
<td>Northeastern University</td>
<td>SUNY College of Environmental Science and Forestry</td>
</tr>
<tr>
<td>Florida Institute of Technology</td>
<td>Northwestern University</td>
<td>SUNY Maritime College</td>
</tr>
<tr>
<td>Florida State University</td>
<td>University of Notre Dame</td>
<td>Swarthmore College</td>
</tr>
<tr>
<td>Fordham University</td>
<td>The Ohio State University</td>
<td>Syracuse University</td>
</tr>
</tbody>
</table>

United States Naval Academy
United States Air Force Academy
United States Coast Guard Academy
University of Virginia
Vanderbilt University
Villanova University
Wake Forest University
Webb Institute
Worcester Polytechnic Institute
Yale University
# MATES Calendar of Events

<table>
<thead>
<tr>
<th>Month</th>
<th>Events</th>
</tr>
</thead>
</table>
| **September** | - Island Beach State Park Beach Plum Festival  
- Freshmen overnight field experience week at Sedge Island, Barnegat Bay |
| **October**    | - Fall Coffee House  
- PSAT testing  
- Clean Ocean Action Fall Beach Sweeps, Seaside Heights  
- Marine Mammal Stranding Center 5K Fun Run, Seaside Heights  
- Annual Student Summit at Island Beach State Park |
| **November**   | - Math League Competitions begin (competition schedule continues through April) |
| **January**    | - After-School Educational Winter Outreach (students in grades 5-8) begins (January - March) |
| **December**   | - Winter Semi-Formal |
| **February**   | - MATES Research Expo  
- Spring Coffee House |
| **March**      | - Jenkinson’s Aquarium  
- 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 Day at Jenkinson’s Aquarium |
| **May**        | - Chemistry Olympics, NJIT, Newark  
- Annual New Jersey Envirothon Competition  
- Junior/Senior Prom  
- Educational Outreach - sea star dissection (student teaching) at Cedar Creek Elementary School, Lacey Township School District  
- Educational Outreach - “Hooked on Fishing Not Drugs” (student teaching) at Stafford Township Intermediate School, Manahawkin  
- National Honor Society inductions  
- Ocean Fun Day - New Jersey Marine Sciences Consortium |
| **June**       | - Barnegat Bay Festival |
STUDENT CLUBS AND ORGANIZATIONS

Chemistry Olympics
Environmental/Birding Club
Envirothon
Extra-Curricular Athletics
Fishing Club
Focus on the Drive
Genders and Sexualties Alliance
Independent Science Research
Key Club
Math League
Mock Trial
National Honor Society
Project Terrapin
Robotics
Shore Bowl
SkillsUSA
Spanish Club
Student Government
Yearbook
**MATES Outside Experiences**

**Summer Enrichment**
- Brown University BELL Pre-College Program (full tuition)
- Consortium for Oceanographic Research Education (CORE) Summer Program
- United States Naval Academy Summer Seminar
- School for International Field Studies/Boston University - A Study of the Marine Park System of the Turks and Caicos Islands
- The Governor’s School of Sciences (hosted by Rutgers University)
- International Travel: China, Israel, Spain, England, Mexico, Costa Rica, the Amazon Rainforest
- Ocean County College Summer Jumpstart Coursework
- NASA Summer Program
- Hugh O’Brian Youth Leadership Program
- Duke University Summer program

**Research:**
- Physiological aspects and growth of summer flounder for the American Fisheries Society
- Shellfish growth in conjunction with Reclam the Bay
- Novel water testing method at the Monmouth Junior Science Symposium
- Concrete structural improvement - Rutgers Junior Science Symposium
MATES Winter Outreach 2020

Celebrating 25 Years of STEM in Our Community!

The Marine Academy of Technology and Environmental Science will be hosting “hands-on” after school Outreach Programs at the MATES facility in Manahawkin, NJ from 4:00 PM to 6:00 PM. Each month will consist of three meetings on Wednesdays. The cost is $15.00 for an entire month (considered a session for only $5 per session). The Outreach Program is designed for upper elementary and middle school students (grades 5 – 8). Please save the top part for your records.

January Outreach Sessions
Wednesday January 8, 2020
Wednesday January 15, 2020
Wednesday January 22, 2020

February Outreach Sessions
Wednesday February 5, 2020
Wednesday February 12, 2020
Wednesday February 19, 2020

March Outreach Sessions
Wednesday March 6, 2020
Wednesday March 13, 2020
Wednesday March 20, 2020

Each month is a repeat of activities. To register, either complete the electronic application found on our MATES bulletinboard site (ocvts.org then go into “MATES”) or please fill out the information below with a check payable to “OCVTS” in the amount of $15.00 to:
MATES
195 Cedar Bridge Road
Manahawkin, NJ 08050
Attn: Winter Outreach

Student’s Name: ________________________________

Address: ______________________________________

________________________________

Phone Number: ________________________________

Email: _________________________________________

School: _________________________________________

Current Grade level: _______  Month Desired: ___________
It is the mission of the Ocean County Vocational Technical School system to prepare students for job placement or further education leading to successful employment. We develop partnerships with affiliated schools, parents, business, industry and community agencies to create and deliver opportunities for students to participate in quality occupational programs and support services. These programs and services are designed to meet the needs of high school students and adult learners, as well as the requirements of employers, colleges, technical schools and the community. All students will achieve the New Jersey Core Curriculum Standards at all grade levels. Our most important products are our quality graduates and our most important service is to provide them with skills for a lifetime. We measure our success by: enrollment in our programs; student attainment of marketable occupational skills; graduates capable and desirous of life-long learning; employer and graduate satisfaction; cost effectiveness of our total system; achievement of our graduates; and organizational and individual recognition and awards received.

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, affectionsal 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. 3332)
Alison Carroll, Federal Section 504 Officer, 732.473.3100 (ext. 4001)
Alison Carroll, Americans with Disabilities Officer, 732.473.3100 (ext. 4001)

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.