Tool Kit to Determine Students’ College and Career Ready Designation under the College and Career Readiness and College Completion Act of 2013

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Governor

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INTRODUCTION

The College and Career Readiness and College Completion Act of 2013 (CCR-CCA) established a number of requirements designed to increase college and career readiness as well as degree completion in Maryland. With a rapidly changing economy and a focus on increasing the percent of young adults with postsecondary degrees, the intent of the Act is to reduce or eliminate the need for students to enroll in remedial courses in college. Students, who enter college prepared, typically benefit from improved persistence and are more likely to complete a degree.

This tool kit provides information to assist local school system staff members in implementing the provisions of the CCR-CCA that relate to preparing students for both college and careers. Under §7-205.1 of the Education Article of the Annotated Code of Maryland: “Beginning with the 2015-2016 school year, all students shall be assessed using acceptable college placement cut scores no later than 11th grade to determine whether the student is ready for college-level credit-bearing course work in English Language Arts, Literacy and Mathematics.” It further requires that “transition courses or other instructional opportunities shall be delivered in the 12th grade to students who have not achieved College and Career Readiness (CCR) by the end of the 11th grade. The implementation of transition courses or other instructional opportunities…shall include an assessment or reassessment of the student after completion of the course; and may not preclude or replace enrollment in a course otherwise required for graduation from high school.” The information provided in this tool kit will assist the local school system in designating students who are College and Career Ready and identifying options and requirements for students who are not ready.

This document is available on the Maryland State Department of Education’s website. If you have any questions, please refer them to the MSDE staff members listed before each section of the tool kit.
Overview of College and Career Readiness:  
A Partnership with Local School Systems  
and their Community Colleges

The College and Career Readiness and College Completion Act of 2013 (CCR-CCA) requires Maryland to prepare all students for college and careers upon graduation from high school. The goal in the law states that “at least 55% of Maryland’s adults aged 25 to 64 years will hold at least an associate’s degree by 2025.” For local school systems, this goal can best be achieved by building on the close relationships already established between the school systems and the local community colleges (see Attachment 1 - Memorandum of Understanding Between Maryland Association of Community Colleges and Public School Superintendents Association of Maryland, page 4).

Community colleges play a critical role in Maryland education as the “next step” for large numbers of high school graduates as:
- the avenue for specific career credentialing through robust AA degrees,
- an affordable start for credit-transfer to a four-year college and a bachelor’s degree,
- a point of return for those seeking career changes and/or advancement,
- a source of enrichment and interest-based learning in a culture of life-long learning.

All students benefit by being eligible for enrollment in credit-bearing courses at their community college in order to engage in dual enrollment courses for academic advancement, career exploration, and learning enrichment. When students leave high school prepared to take credit-bearing college courses, the doors to these opportunities are held open for them. For that reason, achieving a qualifying score on the placement test that is recognized by the college is viable and valid evidence that students are college and career ready in alignment with the CCR-CCA. Options Maryland Local School Systems may use for CCR determination are described on pages 5 and 6.

Students who have not yet met the CCR designation by the end of 11th grade will continue to work toward this goal in their senior year. Students will be enrolled in transition courses or other learning opportunities prior to reassessment at the end of the 12th grade to be designated CCR.

Career/Technology Program (CTE) option for CCR designation:

CTE students are expected to meet the CCR designation in the same manner, with the same options as other students; however, if they complete a State-Approved Career and Technology Education Program of Study, they have an additional reassessment option: a Technical Skill Assessment, recognized by MSDE, leading to early college credit, or to a license or an industry certification.
The following chart illustrates this option:

These varied options support all students in their progress toward college and career readiness (CCR). Each provides students a path that is ambitious but attainable, while respecting their goals, talents, and interests. Graduates must also be aware of the admission requirements of the colleges to which they apply as the acceptable scores for entry vary among two- and four-year colleges.

These standards represent higher expectations for many high school graduates. The partnership of local school systems and their community colleges gives clear academic targets and, as needed, articulated learning supports prior to graduation. Achieving CCR standards positions students for entry into credit-bearing college courses. The result is an economy of time and resources for their future success.
Maryland Local Education Agencies Options for Initial CCR Determination

Please refer questions to:

Angela Holocker, Ed.D.
Assistant State Superintendent
Division of Curriculum, Research, Assessment, and Accountability
Telephone: 410-767-0315
Email: angela.holocker@maryland.gov
## Maryland Local Education Agencies Options for Initial CCR Determination

*(The required score depends on the year in which the student first took the CCR assessment.)*

### English Language Arts (ELA)

<table>
<thead>
<tr>
<th>Assessment Options</th>
<th>2016-2017</th>
<th>2017-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment</strong></td>
<td><strong>Score</strong></td>
<td><strong>Score</strong></td>
</tr>
<tr>
<td>SAT</td>
<td>500+</td>
<td>480+</td>
</tr>
<tr>
<td>• Evidence Based Reading and Writing Section (EBRW)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT</td>
<td>21+</td>
<td>21+</td>
</tr>
<tr>
<td>• Average of English and Reading Subject Tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuplacer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sentence Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP</td>
<td>3+</td>
<td>3+</td>
</tr>
<tr>
<td>• English Language and Composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• English Literature and Composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IB</td>
<td>4+</td>
<td>4+</td>
</tr>
<tr>
<td>• Language A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Literature SL or HL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maryland High School Assessments (MHSA)</td>
<td>4+</td>
<td>4+</td>
</tr>
<tr>
<td>• English 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• English 11</td>
<td></td>
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### Mathematics

<table>
<thead>
<tr>
<th>Assessment Options</th>
<th>2016-2017</th>
<th>2017-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment</strong></td>
<td><strong>Score</strong></td>
<td><strong>Score</strong></td>
</tr>
<tr>
<td>SAT</td>
<td>500+</td>
<td>530+</td>
</tr>
<tr>
<td>• Mathematics Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT</td>
<td>21+</td>
<td>21+</td>
</tr>
<tr>
<td>• Math Subject Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accuplacer</td>
<td>45+</td>
<td>45+</td>
</tr>
<tr>
<td>• College Level Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP</td>
<td>3+</td>
<td>3+</td>
</tr>
<tr>
<td>• AB Calculus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• BC Calculus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Statistics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IB</td>
<td>4+</td>
<td>4+</td>
</tr>
<tr>
<td>• Mathematics SL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mathematics HL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Further Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maryland High School Assessments (MHSA)</td>
<td>4+</td>
<td>4+</td>
</tr>
<tr>
<td>• Algebra II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Geometry*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The Geometry assessment may be used as a no-cost CCR assessment for 11th grade students enrolled in Geometry. Eleventh grade students who earn a score of 4 or higher on the Geometry assessment are not required to take a mathematics transition course or senior year reassessment. For 11th graders enrolled in Geometry who take PARCC, a score of 4 or 5 does not indicate placement in a college credit-bearing course.
Additional CCR Determination Options

<table>
<thead>
<tr>
<th>Dual Enrollment</th>
<th>Students who have been granted permission to take and are enrolled in a college-level credit-bearing mathematics/ELA course by the end of their junior year are considered CCR and do not have to take a CCR assessment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Agreements</td>
<td>LEAs may use alternate means for determining CCR if an agreement exists between the LEA and a local community college that allows students to take college-level credit-bearing mathematics/ELA coursework using different metrics.</td>
</tr>
</tbody>
</table>

Senior Year Reassessment Options

- All of the previously listed CCR determination options
- An assessment agreed to via an agreement with a local community college.
- For CTE students only, a Technical Skill Assessment recognized by MSDE leading to a license or an industry certification

Considerations for students completing Career and Technology Programs

CTE students who are not designated CCR by the end of the 11th grade must:
- complete an appropriate transition course or other instructional opportunity in conjunction with the completion of a State-Approved CTE Program of Study.
- be reassessed by the end of the senior year. Reassessment options include all of the CCR Assessment Options previously described, as well as Career and Technology Education (CTE) Program Technical Skill Assessments that lead to a license or industry certification, or early college credit. A Technical Skill Assessment recognized by MSDE leading to a license or an industry certification is an additional reassessment option for CTE students only. (See the next section for complete details.)
Career and Technology Education (CTE) students are expected to meet the CCR designation in the same manner, with the same options as other students. However, if they complete a State-Approved Career and Technology Education Program of Study, they have an additional **reassessment option**: a Technical Skill Assessment (TSA), recognized by MSDE, leading to early college credit, or to a license or an industry certification. Reassessment options include all of the CCR Assessment Options included on Attachment 2A for English/Language Arts (ELA) and mathematics, as well as those listed on Attachment 2B.

Students must **qualify** to receive the early college credit or industry-recognized credential based on the requirements listed in the attachment. If a CTE completer qualifies for one of the CTE Technical Skill Assessment options prior to 11th grade, they are still required to take both the English/Language Arts and Mathematics assessments. The Technical Skill Assessment options are only considered to be reassessment options. CTE students may “bank” any of the TSAs that they qualify for prior to 11th grade in the event that they do not pass either the ELA or mathematics assessments. CTE Students who do not pass the ELA and/or mathematics assessments are still required to enroll in and complete a transition course or other instructional opportunity. Thus, CTE students may be designated CCR as long as they **complete their CTE program of study** and qualify for the associated industry-recognized credential or early college credit listed in Technical Skill Assessment Chart.

**Please refer questions to:**

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Assistant State Superintendent  
Division of Career and College Readiness  
Maryland State Department of Education  
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Email: lynne.gilli@maryland.gov
Maryland Career and Technology Education Programs of Study  
CCR-CCA of 2013 - Technical Skill Assessment Chart by Career Clusters

NOTE: These assessments only apply to students who are completing a Career and Technology Education (CTE) State Program of Study. This document will be updated on an annual basis. All costs listed are estimated and are subject to change.

<table>
<thead>
<tr>
<th>Career Cluster</th>
<th>Maryland CTE Programs of Study</th>
<th>Industry-Recognized Certification, License and/or Early College Credit</th>
<th>Websites for Program Information (Additional Accommodations Information)</th>
<th>Testing Procedures/Accommodations</th>
<th>Maryland Certification Costs Costs may vary by state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, Media &amp; Communication (AMC)</td>
<td>Printing Technologies (PrintED)</td>
<td>PrintED accreditation in eight areas: Digital File Preparation &amp; Output; Graphic Design; Offset Press Operations/Binding &amp; Finishing; and Screen Printing</td>
<td>Teacher is certified through the program. The program accreditation fee also covers the teacher. Students pass the Graphic Communications assessment and one other from the following list: • Advertising and Design; • Digital File Preparation/Digital File Output; or • Offset Press Operations/Binding and Finishing.</td>
<td><a href="http://www.gaerf.org">www.gaerf.org</a> The Graphic Arts Education and Research Foundation administers the PrintED program. For information on Skill Connect Assessments for PrintED contact: <a href="http://www.workforcereadystem.org">www.workforcereadystem.org</a></td>
<td>Online exam given at the end of the course. $1,800.00 accreditation fee covers accreditation process and first five years. Recertification fee is $1,000 for five years.</td>
</tr>
<tr>
<td>AMC</td>
<td>Interactive Media Production (IMP)</td>
<td>N/A</td>
<td>There are six certifications in Adobe Creative Suite. Students pass one of the following exams: Dreamweaver, Flash Illustrator, InDesign, Photoshop, or Premiere Pro.</td>
<td><a href="http://www.adobe.com/support/certification/ace_certify.html">http://www.adobe.com/support/certification/ace_certify.html</a> Certiport: Form needed for accommodations, one week prior to test. For the form go to: <a href="http://www.certiport.com">http://www.certiport.com</a> Test Candidates/Exam Policy/Accommodations</td>
<td>Online exam given at the end of 3rd or 4th course, dependent on student prep/readiness.</td>
</tr>
</tbody>
</table>

8
<table>
<thead>
<tr>
<th>Career Cluster</th>
<th>Maryland CTE Programs of Study</th>
<th>Industry-Recognized Certification, License and/or Early College Credit</th>
<th>Websites for Program Information (Additional Accommodations Information)</th>
<th>Testing Procedures/ Accommodations</th>
<th>Maryland Certification Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management &amp; Finance (BMF)</td>
<td>Business Management</td>
<td>College-Level Examination Program (CLEP) OR AP Economics</td>
<td>clep.collegeboard.org <a href="http://apcentral.collegeboard.com/home">http://apcentral.collegeboard.com/home</a></td>
<td>CLEP exams are taken at end of the related course</td>
<td>N/A CLEP $77 per exam; colleges may add an administrative fee. School system may also provide the exam on-site with approval from CLEP.</td>
</tr>
<tr>
<td>BMF</td>
<td>Finance and Accounting</td>
<td>College-Level Examination Program (CLEP) OR AP Economics</td>
<td>clep.collegeboard.org <a href="http://apcentral.collegeboard.com/home">http://apcentral.collegeboard.com/home</a></td>
<td>CLEP exams are taken at end of the related course</td>
<td>N/A MOS/Certiport cost determined by purchase plan for a site license or through bulk purchase of vouchers (costs range from $25 - $55 per exam)</td>
</tr>
<tr>
<td>Career Cluster</td>
<td>Maryland CTE Programs of Study</td>
<td>Industry-Recognized Certification, License and/or Early College Credit</td>
<td>Websites for Program Information (Additional Accommodations Information)</td>
<td>Testing Procedures/ Accommodations</td>
<td>Maryland Certification Costs Costs may vary by state</td>
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<td>---------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program</td>
<td>Student</td>
<td></td>
<td>Program</td>
</tr>
<tr>
<td>BMF</td>
<td>Marketing</td>
<td>College-Level Examination Program (CLEP)</td>
<td>Depending on the college: Students may be eligible to earn college credit with a score of 50 or better for: the CLEP Marketing Assessment OR Depending on the college: Students may be eligible to earn college credit with a score of 3 or better for one of the AP Economics exams</td>
<td>CLEP exams are taken at end of the related course The college Board - AP credit by exam Accommodations applied in advance. (<a href="http://www.collegeboard.com/clep">www.collegeboard.com/clep</a> or 800-257-9558 ext. 0)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Administrative Services</td>
<td>Microsoft Office - Word and Excel</td>
<td>Pass both the Microsoft Office Word and Excel exams to earn the MOS certification</td>
<td>Microsoft Office Specialist (MOS) certification exams Accommodations applied for through Certiport.</td>
<td>N/A</td>
</tr>
<tr>
<td>BMF</td>
<td>Academy of Finance (NAF)</td>
<td>NAF Track Certification OR AP Economics</td>
<td>Includes end of course exams, portfolio review, and internship requirements</td>
<td>NAF Academy students are registered through NAF-Track for testing and submission of portfolio requirements</td>
<td>NAF-Track certification is included in the NAF Academy membership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program includes AP courses in Economics</td>
<td>NAF Academy students are registered through NAF-Track for testing and submission of portfolio requirements</td>
<td>NAF Academy membership based on local school system agreement</td>
<td>NAF Academy membership based on local school system agreement</td>
</tr>
</tbody>
</table>
### Maryland Career and Technology Education Programs of Study

**CCR-CCA of 2013 - Technical Skill Assessment Chart by Career Clusters**

<table>
<thead>
<tr>
<th>Career Cluster</th>
<th>Maryland CTE Programs of Study</th>
<th>Industry-Recognized Certification, License and/or Early College Credit</th>
<th>Websites for Program Information (Additional Accommodations Information)</th>
<th>Testing Procedures/Accommodations</th>
<th>Maryland Certification Costs Costs may vary by state</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction &amp; Development (CD)</strong></td>
<td>Construction Design and Management (CDM)</td>
<td>Maryland Center for Construction Education and Innovation (MCCEI)</td>
<td>Pass Autodesk’s AutoCAD or Revit certification assessments</td>
<td>Accommodations applied for through Certiport.</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>CD</strong></td>
<td>Construction Trades: - Electrical - Plumbing - Carpentry - Masonry</td>
<td>National Center for Construction Education and Research (NCCER) Instructor Certification Training Program (ICTP)</td>
<td>Pass the National Center for Construction Education and Research (NCCER) – Core: Intro Craft Skills and Level I of trade area</td>
<td>In school testing by teacher – paper or online Accommodations provided through school-based testing</td>
<td>Must register through an NCCER Sponsor. Teacher certification (ICTP) may cost up to $400/instructor.</td>
</tr>
<tr>
<td><strong>CD</strong></td>
<td>Construction Maintenance: - Welding - HVAC/R - Ind. Maint.</td>
<td>National Center for Construction Education and Research (NCCER) Instructor Certification Training Program (ICTP)</td>
<td>Pass the National Center for Construction Education and Research (NCCER) – Core: Intro Craft Skills and Level I of trade area</td>
<td>In school testing by teacher – paper or online Accommodations provided through school-based testing</td>
<td>Must register through an NCCER Sponsor. Teacher certification (ICTP) may cost up to $400/instructor.</td>
</tr>
<tr>
<td><strong>Consumer Services, Hospitality &amp; Tourism (CSHT)</strong></td>
<td>Food &amp; Beverage Management (ProStart)</td>
<td>N/A</td>
<td>Pass the Level I and Level II end-of-course exams, and complete the 400 hour work-based learning (WBL) requirements for the</td>
<td>Two End-of-course assessments (EOC)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Notes:**
- N/A: Not Applicable
- ProStart: Note: incorporated into the NCCER Welding program are the standards for American Welding Society (AWS) Entry Level certification.
<table>
<thead>
<tr>
<th>Career Cluster</th>
<th>Maryland CTE Programs of Study</th>
<th>Industry-Recognized Certification, License and/or Early College Credit</th>
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<th>Testing Procedures/ Accommodations</th>
<th>Maryland Certification Costs Costs may vary by state</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Program Teacher Student</td>
<td></td>
<td></td>
<td>Program Student</td>
</tr>
<tr>
<td>CSHT</td>
<td>Culinary Arts</td>
<td>Program must be accredited by the American Culinary Federation (ACF)</td>
<td>N/A</td>
<td>Certified Junior Culinarian (CJC): Pass NOCTI written with at least a 70% and pass NOCTI practical with at least a 75%. Students must take both the written and performance tests.</td>
<td><a href="http://www.acfchefs.org/AM/Template.cfm?Section=Accreditation&amp;Template=/CM/HTMLDisplay.cfm&amp;ContentID=14829">www.acfchefs.org/AM/Template.cfm?Section=Accreditation&amp;Template=/CM/HTMLDisplay.cfm&amp;ContentID=14829</a></td>
</tr>
<tr>
<td>CSHT</td>
<td>Hospitality Tourism Management Program</td>
<td>N/A</td>
<td>Certified Hospitality Instructor (CHI)</td>
<td>To earn the Certified Hospitality Tourism Management Professional (CHTMP), students must pass the end of course assessments for Year 1 and Year 2 courses, complete 100 hour work-based learning (WBL), and complete WBL requirements.</td>
<td>hwww.ahlei.org/Programs/High-School-Program-(HTMP)/</td>
</tr>
<tr>
<td>CSHT</td>
<td>Academy of Hospitality and Tourism (NAF)</td>
<td>NAF Track Certification Academy Teachers register online with NAF</td>
<td>Includes end of course exams, portfolio review, and internship requirements</td>
<td>NAF Academy students are registered through NAF-Track for testing and submission of portfolio requirements</td>
<td>NAF-Track certification is included in the NAF Academy membership</td>
</tr>
<tr>
<td>Career Cluster</td>
<td>Maryland CTE Programs of Study</td>
<td>Industry-Recognized Certification, License and/or Early College Credit</td>
<td>Websites for Program Information (Additional Accommodations Information)</td>
<td>Testing Procedures/Accommodations</td>
<td>Maryland Certification Costs</td>
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<td></td>
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<td>Program</td>
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</tbody>
</table>
| CSHT           | Careers in Cosmetology        | N/A     | Senior Cosmetology License | The MD State Board of Cosmetology requires students to pass both theory and practical exams to be licensed. | www.dllr.state.md.us/license/cos/cosexams.shtml | Teacher scheduled | N/A | Practical & Theory - $79  
Practical - $49  
Theory - $49  
License - $25 |
| CSHT           | Barbering                     | N/A     | Master Barber License | The MD State Board of Barbers requires students to pass both theory and practical exams to be licensed. | www.dllr.state.md.us/license/barbers/barberexam.shtml | Teacher scheduled | N/A | Practical & Theory - $79  
Practical - $49  
Theory - $49  
License - $50 |
| Environmental, Agricultural & Natural Resources (EANR) | Horticulture Services | N/A | Certified Prof. Hort. Pesticide Applicator | Pass the Certified Professional Horticulturalist (CPH) assessment | http://mnlga.org | Contact MD Dept. of Agriculture | Teacher certification $125 for MNLGA members, $195 for non-members | $35 per test |
| EANR           | CASE – Curriculum for Agricultural Sciences Education | Instructors must attend CASE Institutes for each course they will teach | Postsecondary credit available to completers at Rutgers University and UMCP | http://www.case4learning.org  
One test per course offered: AFNR, Principles of Agriculture-Animal, Principles of Agriculture-Plant, Food, Science & Safety, and Plant & Animal Biotechnology | End-of-program assessments are being developed by CASE | $285/teacher for online account; currently, MSDE provides a statewide license | $15 per test |
<table>
<thead>
<tr>
<th>Career Cluster</th>
<th>Maryland CTE Programs of Study</th>
<th>Industry-Recognized Certification, License and/or Early College Credit</th>
<th>Websites for Program Information (Additional Accommodations Information)</th>
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<th>Maryland Certification Costs Costs may vary by state</th>
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<td></td>
<td></td>
<td>Program</td>
<td>Teacher</td>
<td>Student</td>
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<tr>
<td>Environmental Studies</td>
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<td>Complete the program with a satisfactory grade determined by Towson University (TU) for 3 credits in Environmental Biology awarded by TU</td>
</tr>
<tr>
<td>Health &amp; Biosciences (HB)</td>
<td>Academy of Health Professions (AHP)</td>
<td>Specialty Course - Certified Nursing Assistant (CNA) portion must be approved by the MD Board of Nursing (MBON)</td>
<td>Must be a Registered Nurse (RN)</td>
<td>Pass the teacher-developed Certified Nursing Assistant assessment</td>
<td><a href="http://www.mbon.org/main.">http://www.mbon.org/main.</a></td>
</tr>
<tr>
<td>HB</td>
<td>AHP/GNA</td>
<td>Geriatric Nursing Assistant (GNA)</td>
<td>Must be an RN</td>
<td>Pass the National Nurse’s Aide Assessment Program (NNAAP) administered through the American Red Cross. Students must first hold the CNA certificate in order to be eligible to take the GNA exam</td>
<td><a href="http://www.mbon.org/main.">http://www.mbon.org/main.</a> <a href="http://www.pearsonvue.com/md/nurseaides/">http://www.pearsonvue.com/md/nurseaides/</a> - copy of GNA handbook</td>
</tr>
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<td>Program</td>
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<td>Student</td>
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<tr>
<td>HB</td>
<td>AHP/ Pharm Tech</td>
<td>Specialty Course - Pharmacy Technician (AHP specialty course)</td>
<td>Pass one of the following:</td>
<td>• <a href="http://www.passassured.com">www.passassured.com</a> /www.dhmh.state.md.us/pharmacyboard/ <a href="http://www.ptcb.org">www.ptcb.org</a> <a href="http://www.nhanow.com">www.nhanow.com</a></td>
<td>$250/student seat license</td>
</tr>
<tr>
<td></td>
<td>AHP/CCMA</td>
<td>Specialty Course – Certified Clinical Medical Assistant</td>
<td>Pass the National HealthCareers CCMA Certification assessment</td>
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*HB* indicates the program is offered at the high school level.
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<tr>
<td><strong>HB</strong></td>
<td>AHP/Dental Assisting</td>
<td>Program must be approved by the MD Board of Dental Examiners</td>
<td>Pass the Dental Assisting National Board of Radiation Health and Safety (RHS) and the MD General Exams (MDG). Certified to expose radiographs and in General Chairside procedures.</td>
<td><a href="http://www.dhmh.md.gov/dental">www.dhmh.md.gov/dental</a> <a href="http://www.dentalassisting.com">www.dentalassisting.com</a></td>
<td>$175 for the Radiation Health and Safety (RHS) exam $200 for MD General Chairside Exam Students should take both examinations</td>
</tr>
<tr>
<td><strong>HB</strong></td>
<td>PLTW Biomedical Science</td>
<td>BA degree(s) and at least two (2) college semesters of biology with lab experiences Students are eligible to earn college credit from other PLTW affiliate colleges and universities with a score of 6 or better on any of the end-of-course exams. Students are also eligible to earn 4 college credits from Stevenson University for BIO 113 and BIO 113L by doing the following: Completing the program, earning a GPA of 3.0 or higher in all courses, and receiving a score of 7 or better on the PLTW end-of-course assessments.</td>
<td><a href="http://www.pltw.org">www.pltw.org</a> <a href="http://www.stevenson.edu/academics/schools/sciences/stem-initiatives/project-lead-the-way/">http://www.stevenson.edu/academics/schools/sciences/stem-initiatives/project-lead-the-way/</a></td>
<td>College certification process as set forth by PLTW and MSDE Fees are associated with the award of credit.</td>
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<tr>
<td>Human Resource Services (HRS)</td>
<td>Fire Science (Maryland Fire and Rescue Institute - MFRI)</td>
<td>All programs should be affiliated with the Maryland Fire and Rescue Institute (MFRI)</td>
<td><a href="http://www.mfri.org">www.mfri.org</a> [<a href="http://www.ets.org/portal/site/ets/menuitem">www.ets.org/portal/site/ets/menuitem</a>)</td>
<td>Paper and pencil or online test and practical experience</td>
<td>N/A</td>
</tr>
<tr>
<td>HRS</td>
<td>Teacher Academy of Maryland</td>
<td>- Must hold a MD Profess. Certificate - Hold a MA degree, MA equivalent or have 18 hrs</td>
<td><a href="http://www.americanheart.org">www.americanheart.org</a> <a href="http://www.redcross.org">www.redcross.org</a></td>
<td>Practical test and paper and pencil or online test</td>
<td>N/A</td>
</tr>
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<td>Program Teacher Student</td>
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<td>Toward MA - Three years of teaching and Recommendation from principal and/or supervisor Writing – 162, and Mathematics – 150 <strong>OR</strong> SAT with a combined math and verbal (critical reading) score of 1100 The following colleges/universities have a statewide agreement for credit and/or scholarships for successful TAM program completers: Towson University Stevenson University Coppin State University St. Mary’s College of Maryland Hood College Salisbury University</td>
<td><a href="http://mset.org/stars_certify.php">http://mset.org/stars_certify.php</a> <a href="http://www.esri.com/training/main/certification/desktopEntry_10-3">http://www.esri.com/training/main/certification/desktopEntry_10-3</a></td>
<td>On line examination taken at the end of the program of study, within the Information/Communications Technology Pathway</td>
<td>N/A $150/student $225/students which includes retakes</td>
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</table>
### Maryland Career and Technology Education Programs of Study

**CCR-CCA of 2013 - Technical Skill Assessment Chart by Career Clusters**

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<tr>
<td>HRS</td>
<td>Early Childhood Education</td>
<td>Early Childhood Education</td>
<td>Child Development Associate (Candidates do not receive a pass or fail score on the CDA Exam and Verification Visit. Rather, the Council comprehensively evaluates how candidates score in each of the thirteen CDA Functional Areas on the CDA Exam and during the CDA Verification Visit to make a credentialing decision.)</td>
<td>Prior to submitting the CDA application, a CDA candidate with a documented disability should submit the special accommodations request form with to the Council</td>
<td>Students work-based learning experience must be in a licensed child care facility</td>
<td>$425/student (Some financial support may be available from the Child Care Career and Professional Development Fund through MSDE)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Child Development Associate</td>
<td><a href="http://www.cdacouncil.org">http://www.cdacouncil.org</a> Council for Professional Recognition</td>
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<tr>
<td>Information Technology (IT)</td>
<td>Academy of Information Technology (NAF)</td>
<td>NAF Track Certification</td>
<td>Includes end of course exams, portfolio review, and internship requirements</td>
<td><a href="http://dev.naf.org/our-approach/nafttrack-certified-hiring/nafttrack-certification">http://dev.naf.org/our-approach/nafttrack-certified-hiring/nafttrack-certification</a></td>
<td>NAF Academy students are registered through NAF-Track for testing and submission of portfolio requirements</td>
<td>NAF-Track certification is included in the NAF Academy membership</td>
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<td>Academy Teachers register online with NAF</td>
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<tr>
<td>IT</td>
<td>Database Academy (Oracle)</td>
<td>Oracle Academy</td>
<td>Pass either the:</td>
<td>Online exam given at the end-of-course.</td>
<td>Membership is free and must be renewed every three years. Membership allows teachers to get discounted vouchers (25% off) toward</td>
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<td></td>
<td></td>
<td>Teachers are not required to hold the Java or Database Certifications</td>
<td>• Java Foundations Certified Junior Associate</td>
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<td>• Java Foundations Certified Junior Associate</td>
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<td>Or</td>
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<td>• Database Foundations Junior Associate</td>
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<td>Database Foundations Junior Associate</td>
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<td>• $92 or $71.25 w/ a 25% discount</td>
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</tbody>
</table>
## Maryland Career and Technology Education Programs of Study

### CCR-CCA of 2013 - Technical Skill Assessment Chart by Career Clusters

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<tr>
<td></td>
<td></td>
<td>Program</td>
<td>Teacher Student</td>
<td>Online exam given at the end-of-course.</td>
<td>Must be registered with Cisco Regional Training Center For Discounts on CompTIA exam, must be registered as a CompTIA academy partner</td>
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<tr>
<td></td>
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<td></td>
<td>Associate Or Database Foundations Junior Associate</td>
<td></td>
<td>Cisco Exams – Discounted for Academy Partners • CCENT - $63.53 • CCNA &amp; CCNA-Security - $125 • Cyber Ops - $300 (price expected to drop once out of the pilot phase (Jan 2018) CompTIA Exams – Discounted for Academy Partners • A+ - (2 exams at $97/ea) • Linux Exams through NDG or CompTia • NDG Linux Essentials - $110 • CompTIA Linux+ (2 exams @ $157 exam)</td>
</tr>
<tr>
<td>IT</td>
<td>IT Networking Academy</td>
<td>Cisco Academy</td>
<td>Depending on the pathway, pass one or more of the following: • Cisco CCENT • Cisco CCNA • Cisco CCNA Security • Cisco Cyber Ops • CompTIA A+ • NDG Linux Essentials • CompTIA Linux+</td>
<td><a href="https://www.netacad.com/careers/certifications/">https://www.netacad.com/careers/certifications/</a> <a href="http://partners.comptia.org">http://partners.comptia.org</a></td>
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### Notes
- Students’ certification fees.
- Cost may vary by state.
# Maryland Career and Technology Education Programs of Study
## CCR-CCA of 2013 - Technical Skill Assessment Chart by Career Clusters

| Career Cluster | Maryland CTE Programs of Study | Industry-Recognized Certification, License and/or Early College Credit | Websites for Program Information (Additional Accommodations Information) | Testing Procedures/Accommodations | Maryland Certification Costs
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<tr>
<td><strong>IT</strong></td>
<td>PLTW Computer Science</td>
<td>Computer Science and Cyber Security</td>
<td><a href="https://apstudent.collegeboard.org/apcourse/ap-computer-science-principles">https://apstudent.collegeboard.org/apcourse/ap-computer-science-principles</a></td>
<td>The College Board - AP Computer Science Principles</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Manufacturing Engineering &amp; Technology (MET)</strong></td>
<td>Project Lead The Way (PLTW) Pathway to Engineering</td>
<td>College Certification Process Training Institute - 80 hr./course at a PLTW affiliate institution</td>
<td><a href="http://www.pltw.org">http://www.pltw.org</a></td>
<td>End-of-Course exam</td>
<td>UMBC - $5 fee for the credit by exam</td>
</tr>
</tbody>
</table>

**Testing Procedure/Accommodations**

- Pass the AP Computer Science Principles Exam (Postsecondary credit varies by college).

**Maryland Certification Costs**

- Costs may vary by state

- **IT**
  - AP exam cost is $93 per exam.

- **Manufacturing Engineering & Technology (MET)**
  - UMBC - $5 fee for the credit by exam
  - RIT - $225 per course for students with a stanine score of 6 or better on the PLTW end-of-course assessments.
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<tr>
<td>MET</td>
<td>MET-NIMS</td>
<td>NIMS Accreditation and Credentialing Process</td>
<td><a href="https://www.nims-skills.org/web/nims/home">https://www.nims-skills.org/web/nims/home</a></td>
<td>All areas except Measurement, Materials and Safety (MMS) have both a performance and a theory exam. MMS only has a theory exam.</td>
<td>$1500 + $40 Lifetime Registration fee for each teacher</td>
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<td>NIMS Accreditation is optional; however, if a program goes through the process, then teachers must be credentialed in the four areas that they instruct.</td>
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<td>Two tests are required. Only the theory exam has a cost associated with it. Students pay a one-time registration fee of $40.</td>
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<td>Students from non-accredited programs pay $35/exam (2 exams @ $35 - $70 + $40 registration fee - $110)</td>
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<tr>
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<td>Program Teacher Student</td>
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<td>Costs may vary by state</td>
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<tr>
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<td>Students who earn NIMS certification are eligible for articulated credit in the manufacturing programs at the Community College of Baltimore County</td>
<td></td>
<td></td>
<td>Program</td>
</tr>
</tbody>
</table>
| Transportation Technologies (TT) | Automotive Technology | National Automotive Technology Education Foundation (NATEF) Automotive Service Excellence (ASE) | Pass one of the following ASE Student Certification exams:  
- Suspension and Steering,  
- Brakes,  
- Electrical/Electronic Systems,  
- Engine Performance,  
- Engine Repair,  
- Automatic Transmission/Transaxle,  
- Manual Drive Train and Axles, OR  
- Heating and Air Conditioning.  
Developed by ASE in partnership with AYES, NATEF, and SkillsUSA. Transcribed credit at CCBC, | National Automotive Student Skills Standard Assessment | NATEF  
Estimated costs:  
Initial: $1,269  
Recertification: $917  
AYES affiliation no cost | $30 per student per academic year. The fee allows for two tests during the test windows. |
|               |                                | www.NA3SA.com  
www.natef.org  
www.ayes.org | | | | |
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</table>
| TT            | Autobody Collision Repair Technician | National Automotive Technology Education Foundation (NATEF) Automotive Service Excellence (ASE) | Pass one of the following ASE Student Certification exams:  
  • Painting and Refinishing OR  
  • Structural Analysis and Damage Repair.  
  Developed by ASE in partnership with AYES, NATEF, and SkillsUSA  
  Transcribed credit available at Penn College of Technology |  
  www.NA3SA.com  
  www.natef.org  
  www.ayes.org |  
  At end-of-course  
  Contact Wanda Bloomer at NATEF.  
  800-362-0544 three weeks prior  
  In-house accommodations can be provided.  
  NA3SA is built with extended time. |  
 NATEF Estimated costs:  
  Initial: $1,269  
  Recertification $917 | $30 per student per academic year. The fee allows for two tests during the testing windows. |
| TT            | Auto body/ Collision Repair Technician | I-CAR (Inter-Industry Conference on Auto Collision Repair) | Pass the I-CAR Platinum exam. Transcribed credit available at Penn College of Technology |  
  https://www.i-car.com/Home/Career-Technical-Schools | $1,100/school | $50/student for I-CAR account; $100 end-of-program exams (2) |
| TT            | Medium-Heavy Truck | National Automotive Technology Education Foundation (NATEF) Automotive Service Excellence (ASE) | Pass the Diesel Engines ASE Student Certification exam Developed by ASE in partnership with AYES, NATEF, and |  
  www.NA3SA.com  
  www.natef.org  
  www.ayes.org |  
  Contact Wanda Bloomer at NATEF.  
  800-362-0544 three weeks before the test  
  In-house |  
 NATEF Estimated Costs:  
  Initial: $1,269  
  Recertification $917 | $30 per student per academic year. The fee allows for a single attempt at any or all tests in a |
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<td></td>
<td>Program  Teacher  Student</td>
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<td>accommodations can be provided.</td>
<td>series.</td>
</tr>
<tr>
<td>Automotive Service Excellence (ASE)</td>
<td>SkillsUSA Transcripted credit available at Penn College of Technology</td>
<td></td>
<td>NA3SA is built with extended time.</td>
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<td></td>
</tr>
</tbody>
</table>
English/Language Arts Graduation and Career and College Readiness Requirements for Each Graduating Class from 2018-2020

Please refer questions to:

Ms. Ava B. Spencer
Coordinator of English Language Arts
Maryland State Department of Education
Division of Curriculum, Research, Assessment and Accountability
Telephone: 410.767.0830
Email: ava.spencer@maryland.gov
## Graduating Class of 2018 (Students entering 9th Grade during the 2014/2015 School Year)

<table>
<thead>
<tr>
<th>School Year</th>
<th>Grade</th>
<th>ELA Graduation Requirements For Public High Schools in Maryland</th>
<th>Additional ELA Requirements put into law by the College and Career Readiness and College Completion Act of 2013 (CCR)</th>
<th>CCR Assessment Options</th>
<th>12th Grade Transition Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/2015</td>
<td>9th</td>
<td>Students must earn 4 credits in English Language Arts.</td>
<td>Students must be assessed by the end of the 11th grade to determine readiness for credit-bearing college-level coursework, using one of the following:</td>
<td>Students not designated CCR by the end of the 11th grade must participate in one of the following options:</td>
<td></td>
</tr>
</tbody>
</table>
| 2015/2016   | 10th  | No passing score is required.                                  | English 10  
  o Score of Level 4 or higher  
  English 11  
  o Score of Level 4 or higher  
  SAT (administered 2017 - 2018)  
  o Score of 480 or higher on Evidence-based Reading and Writing (EBRW) Section  
  SAT (administered 2016 - 2017)  
  o Score of 500 or higher on Evidence-based Reading and Writing (EBRW) Section  
  ACT  
  o Score of 21 or higher (Average of English and Reading scores)  
  AP Lit & Comp or AP Lang & Comp  
  o Score of 3 or higher  
  IB Language A: Literature SL or HL, or IB Language A: Language & Literature SL or HL  
  o Score of 4 or higher  
  Accuplacer  
  o Score of 79+ Reading, 6+ Writing, and 90+ Sentence Skills  
  Dual enrollment  
  o Admission to and enrollment in a Maryland IHE’s appropriate ELA college credit-bearing course  |
| 2016/2017   | 11th  | No Bridge Project required.                                   | Note: LEAs may use alternate CCR determination options, if an agreement exists between the LEA and a local community college that allows students to take college-level credit-bearing coursework using different metrics. |
| 2017/2018   | 12th  | Students in the graduating Class of 2018 must have taken the Maryland High School Assessment (MHSA) English 10. No passing score is required. |

Note: LEAs may use alternate CCR determination options, if an agreement exists between the LEA and a local community college that allows students to take college-level credit-bearing coursework using different metrics.
# Maryland English Language Arts (ELA) Graduation and College and Career Readiness Requirements

## Graduating Class of 2019 (Students entering 9th Grade during the 2015/2016 School Year)

<table>
<thead>
<tr>
<th>School Year</th>
<th>Grade</th>
<th>ELA Graduation Requirements for Public High Schools in Maryland</th>
<th>CCR Assessment Options</th>
<th>12th Grade Transition Course</th>
</tr>
</thead>
</table>
| 2015/2016   | 9th   | Students must earn 4 credits in English Language Arts.        | Students must be assessed by the end of the 11th grade to determine readiness for credit-bearing CCR, using one of the following:  
- English 10  
  - Score of Level 4 or higher  
- English 11  
  - A score of Level 4 or higher  
- SAT (administered 2017 – 2018 or after)  
  - Score of 480 or higher on Evidence-based Reading and Writing (EBRW) Section  
- SAT (administered 2016 - 2017)  
  - Score of 500 or higher on Evidence-based Reading and Writing (EBRW) Section  
- ACT  
  - Score of 21 or higher (Average of English and Reading scores)  
- AP Lit & Comp or AP Lang & Comp  
  - Score of 3 or higher  
- IB Language A: Literature SL or HL, or IB Language A: Language & Literature SL or HL  
  - Score of 4 or higher  
- Accuplacer  
  - Score of 79+ Reading, 6+ Writing, and 90+ Sentence Skills (students must meet minimum scores on all three)  
- Dual enrollment  
  - Admission to and enrollment in a Maryland IHE’s appropriate ELA college credit-bearing course |
| 2016/2017   | 10th  | If the MHSA English 10 graduation requirement is not met after two attempts, the student may submit an English Bridge Project.  
Students must achieve a score of 725 on the Maryland High School Assessment (MHSA) English 10. |
| 2017/2018   | 11th  | Students not designated CCR by the end of the 11th grade must participate in one of the following options:  
- Next ELA course in the sequence with support by adding additional time and additional content addressed, or  
- ELA transition course, or  
- Transition course articulated with a college, or  
- Other ELA instructional opportunity, such as:  
  - ELA module  
  - Online ELA course  
  - Hybrid ELA course |
| 2018/2019   | 12th  | Students who were not designated CCR by the end of the 11th grade must be reassessed by the end of the senior year. Reassessment options include all of the CCR Assessment Options listed in the column to the left. Additional senior year CCR reassessment options include:  
- Summative Assessment aligned to the ELA Transition Course articulated by a college, or  
- Career and Technology Education Program Technical Skill Assessment that qualifies students to earn college credit or leads to a license or an industry certification. |

Note: LEAs may use alternate CCR determination option, if an agreement exists between the LEA and a local community college that allows students to take college-level credit-bearing coursework using different metrics.
# Maryland English Language Arts (ELA) Graduation and College and Career Readiness Requirements

## Graduating Class of 2020 (Students entering 9th Grade during the 2016/2017 School Year)

<table>
<thead>
<tr>
<th>School Year</th>
<th>Grade</th>
<th>ELA Graduation Requirements for Public High Schools in Maryland</th>
<th>Additional ELA Requirements put into law by the College and Career Readiness and College Completion Act of 2013 (CCR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016/2017</td>
<td>9th</td>
<td>Students must earn 4 credits in English Language Arts.</td>
<td>Students not designated CCR by the end of the 11th grade must participate in one of the following:</td>
</tr>
<tr>
<td>2017/2018</td>
<td>10th</td>
<td>Students must achieve a score of 725 on the Maryland High School Assessment (MHSA) English 10 assessment. If the MSHA English 10 graduation requirement is not met after two attempts, the student may submit an English Bridge Project.</td>
<td>- Next ELA course in the sequence with support by adding additional time and additional content addressed, or</td>
</tr>
<tr>
<td>2018/2019</td>
<td>11th</td>
<td>Students must achieve a score of 725 on the Maryland High School Assessment (MHSA) English 10 assessment. If the MSHA English 10 graduation requirement is not met after two attempts, the student may submit an English Bridge Project.</td>
<td>- ELA transition course, or</td>
</tr>
<tr>
<td>2019/2020</td>
<td>12th</td>
<td>Students must achieve a score of 725 on the Maryland High School Assessment (MHSA) English 10 assessment. If the MSHA English 10 graduation requirement is not met after two attempts, the student may submit an English Bridge Project.</td>
<td>- Transition course articulated with a college, or</td>
</tr>
</tbody>
</table>

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**CCR Assessment Options**

- **English 11**
  - Score of Level 4 or higher
- **SAT** (administered 2017 – 2018 or after)
  - Score of 480 or higher on Evidence-based Reading and Writing (EBRW) Section
- **SAT** (administered 2016 - 2017)
  - Score of 500 or higher on Evidence-based Reading and Writing (EBRW) Section
- **ACT**
  - Score of 21 or higher (Average of English and Reading scores)
- **AP Lit & Comp or AP Lang & Comp**
  - Score of 3 or higher
- **IB Language A: Literatue SL or HL, or IB Language A: Language & Literature SL or HL**
  - Score of 4 or higher
- **Accuplacer**
  - Score of 79+ Reading, 6+ Writing, and 90+ Sentence Skills (students must meet minimum scores on all three)
- **Dual enrollment**
  - Admission to and enrollment in a Maryland IHE’s appropriate ELA college credit-bearing course

**Note:** LEAs may use alternate CCR determination options, if an agreement exists between the LEA and a local community college that allows students to take college-level credit-bearing coursework using different metrics.

**12th Grade Transition Course**

- Students who were not designated CCR by the end of the 11th grade must be reassessed by the end of the senior year. Reassessment options include all of the CCR Assessment Options listed in the column to the left. Additional senior year CCR reassessment options include:
  - Summative Assessment aligned to the ELA Transition Course articulated by a college, or
  - Career and Technology Education Program Technical Skill Assessment that qualifies students to earn college credit or leads to a license or an industry certification.
Mathematics Graduation and Career and College Readiness Requirements for Each Graduating Class from 2018–2020

Please refer questions to:

Ms. Debra L. Ward
Coordinator of Mathematics
Maryland State Department of Education
Division of Curriculum, Research, Assessment and Accountability
Telephone: 410.767.0355
Email: debra.ward@maryland.gov
### Graduating Class of 2018 (Students entering 9th Grade during the 2014/2015 School Year)

<table>
<thead>
<tr>
<th>School Year</th>
<th>Grade</th>
<th>Mathematics Graduation Requirements for Public High Schools in Maryland</th>
<th>Additional Mathematics Requirements put into law as a result of the College and Career Readiness and College Completion Act of 2013 (CCR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014/2015</td>
<td>9th</td>
<td>Students must earn 3 credits in mathematics which must include a credit in:</td>
<td></td>
</tr>
<tr>
<td>2015/2016</td>
<td>10th</td>
<td>- Algebra</td>
<td></td>
</tr>
<tr>
<td>2016/2017</td>
<td>11th</td>
<td>- Geometry</td>
<td></td>
</tr>
<tr>
<td>2017/2018</td>
<td>12th</td>
<td>Maryland’s goal for all students is completion of Algebra II. No completion of Algebra II is not a Maryland mathematics credit requirement.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enrolment in a mathematics course during 12th grade is required.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note the University System of Maryland (USM) Mathematics Admission Requirements related to the completion of Algebra II in the footnote below.</td>
<td></td>
</tr>
</tbody>
</table>

### CCR Assessment Options

- Students must be assessed by the end of the 11th grade to determine readiness for credit-bearing college level coursework, using one of the following:
  - MHSA Algebra II
    - Score of 4 or higher
  - For 11th graders enrolled in Geometry, a score of 4 or higher on the Geometry assessment may satisfy the CCR determination.²
    - SAT (administered 2017-2018)
      - Score of 530 or higher on the Mathematics portion
    - SAT (administered 2016-2017)
      - Score of 500 or higher on the Mathematics portion
    - ACT
      - Score of 21 or higher on Mathematics portion
    - AP Calculus AB, AP Calculus BC, AP Statistics,
      - Score of 3, or higher.
    - IB Mathematics
      - Score of 4 or higher
    - Accuplacer
      - College Level Mathematics test
        - Score of 45 or higher
    - Dual enrollment
      - Admission to and enrollment in a Maryland IHE’s appropriate mathematics college credit bearing course

### 12th Grade Transition Course

- Students not designated CCR by the end of the 11th grade must participate in one of the following options:
  - Next mathematics course in the sequence with support, or
  - Transition course articulated with a college, or
  - Other mathematics instructional opportunity:
    - Modules
    - Online Mathematics course
    - Hybrid Mathematics Course

### Notes

1. The Mathematics Admissions requirements for schools in the University System of Maryland exceed the MARYLAND Mathematics Graduation Requirements. (see details below)

   The University System of Maryland (USM) Board of Regents in December 2009 approved a new academic policy that requires incoming freshman undergraduates to have completed four years of high school math. The requirement applies to student applicants who entered ninth grade in Fall 2011 (Seniors during 2014-2015). The coursework must include Algebra I, Geometry, and Algebra II. Students who complete Algebra II before their senior year must also complete the fourth-year math requirement. They can do so by taking a course during their senior year that is intensive in algebra and expands on algebra foundations developed during Algebra II.

   The University System of Maryland is comprised of: Bowie State University; Coppin State University; Frostburg State University; Salisbury University; Towson University; University of Maryland, Baltimore; University of Maryland, Baltimore County; University Center for Environmental Science; University of Maryland, College Park; University of Maryland, Eastern Shore; University of Maryland, University College; and University of Baltimore.

2. Unless otherwise determined, districts may use the Geometry assessment as a means to satisfy the CCR assessment requirement for 11th grade students taking Geometry. Please note that a score of 4 or higher on the Geometry assessment does not indicate readiness for college-level credit-bearing mathematics coursework.
## Maryland Mathematics Graduation and College and Career Readiness Requirements

### Graduating Class of 2019 (Students entering 9th Grade during the 2015/2016 School Year)

<table>
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<th>12th Grade Transition Course</th>
</tr>
</thead>
</table>
| 2015/2016   | 9th   | Students must earn 3 credits in mathematics which must include a credit in: Algebra, Geometry. | Students must be assessed by the end of the 11th grade to determine readiness for credit-bearing college level coursework, using one of the following:  
- MHSA Algebra II  
  - Score of 4 or higher  
- For 11th graders enrolled in Geometry, a score of Level 4 or higher on the Geometry assessment may satisfy the CCR determination.  
- SAT (administered 2017 - 2018)  
  - Score of 530 or higher on the Mathematics portion  
- SAT (administered 2016 - 2017)  
  - Score of 500 or higher on the Mathematics portion  
- ACT  
  - Score of 21 or higher on Mathematics portion  
- AP Calculus AB, AP Calculus BC, AP Statistics  
  - Score of 3 or higher  
- IB Mathematics  
  - Score of 4, or higher  
- Accuplacer  
  - College Level Mathematics test  
  - Score of 45 or higher  
- Dual enrollment  
  - Admission to and enrollment in a Maryland IHE’s appropriate mathematics college credit-bearing course  
  - Note: LEAs may use alternate CCR determination options, if an agreement exists between the LEA and a local community college that allows students to take college-level credit-bearing mathematics coursework using different metrics.  
Students who were not designated college and career ready by the end of the 11th grade must participate in one of the following options:  
- Next mathematics course in the sequence with support, or  
- Transition course articulated with a college, or  
- Other mathematics instructional opportunity:  
  - Modules  
  - Online Mathematics course  
  - Hybrid Mathematics Course  
Students not designated college and career ready by the end of the 11th grade must reassessed by the end of the senior year. Additional CCR reassessment options include:  
- Summative Assessment aligned to the Mathematics Transition Course articulated with a college, or  
- Career and Technology Education Program Technical Skill Assessment that qualifies students to earn college credit or leads to a license or an industry certification. | |
| 2016/2017   | 10th  | Enrollment in a mathematics course during 12th grade is required. | | |
| 2017/2018   | 11th  | Note: Students who took the MHSA for Algebra I assessment during the 2014/2015 or 2015/2016 school year or took the Algebra Data/Analysis Assessment during the 2013/2014 school year only needed to participate in the assessment to satisfy their Maryland Mathematics Assessment graduation requirement. If the MHSA for Algebra I graduation assessment requirement is not met after two attempts, the student may submit a successful Algebra I Bridge Project. | | |
| 2018/2019   | 12th  | Maryland's goal for all students is completion of Algebra II but completion of Algebra II is not a Maryland mathematics credit requirement. | | |

1. The Mathematics Admissions requirements for schools in the University System of Maryland exceed the Maryland Mathematics Graduation Requirements. (see details below)

2. The University System of Maryland (USM) Board of Regents in December 2009 approved a new academic policy that requires incoming freshman undergraduates to have completed four years of high school math. The requirement applies to student applicants who entered ninth grade in Fall 2011 (Seniors during 2014-2015). The coursework must include Algebra I, Geometry, and Algebra II. Students who complete Algebra I before their senior year must also complete the fourth-year math requirement. They can do so by taking a course during their senior year that is intensive in algebra and expands on algebra foundations developed during Algebra II.

The University System of Maryland is comprised of: Bowie State University; Coppin State University; Frostburg State University; Salisbury University; Towson University; University of Maryland, Baltimore; University of Maryland, Baltimore County; University Center for Environmental Science; University of Maryland, College Park; University of Maryland, Eastern Shore; University of Maryland, University College; and University of Baltimore.

3. Unless otherwise determined, districts may use the Geometry assessment as a means to satisfy the CCR assessment requirement for 11th grade students taking Geometry. Please note that a score of 4 or higher on the Geometry assessment does not indicate readiness for college-level credit-bearing mathematics coursework.
### Maryland Mathematics Graduation and College and Career Readiness Requirements

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<td>2016/2017</td>
<td>9th</td>
<td>Students must earn 3 credits in mathematics which must include a credit in:</td>
<td>Students must be assessed by the end of the 11th grade to determine readiness for credit-bearing college level coursework, using one of the following:</td>
<td>Students not designated CCR by the end of the 11th grade must participate in one of the following options:</td>
</tr>
</tbody>
</table>
| 2017/2018    | 10th  | • Algebra | • MSHA Algebra II  
- Score of 4 or higher  
- For 11th graders enrolled in Geometry, a score of Level 4 or higher on the Geometry assessment may satisfy the CCR determination.  
- SAT (administered 2017 - 2018)  
  - Score of 530 or higher on the Mathematics portion  
- SAT (administered 2016 - 2017)  
  - Score of 500 or higher on the Mathematics portion  
- ACT  
  - Score of 21 or higher on Mathematics portion  
- AP Calculus AB, AP Calculus BC, AP Statistics  
  - Score of 3, or higher  
- IB Mathematics  
  - Score of 4, or higher  
- Accuplacer  
  - College Level Mathematics test  
  - Score of 45 or higher  
- Dual enrollment  
  - Admission to and enrollment in a Maryland IHE’s appropriate mathematics college credit-bearing course  
| 2018/2019    | 11th  | • Geometry | Note: LEAs may use alternate CCR determination options, if an agreement exists between the LEA and a local community college that allows students to take college-level credit-bearing mathematics coursework using different metrics. | • Next mathematics course in the sequence with support, or  
• Transition course articulated with a college, or  
• Other mathematics instructional opportunity:  
  - Modules  
  - Online Mathematics course  
  - Hybrid Mathematics Course |
| 2019/2020    | 12th  | Enrollment in a mathematics course during 12th grade is required. | | Students who were not designated as CCR by the end of the 11th grade must be reassessed by the end of the senior year. Additional CCR reassessment options include: |

| Note: The Mathematics Admissions requirements for schools in the University System of Maryland exceed the Maryland Mathematics Graduation Requirements. (see details below) The University System of Maryland (USM) Board of Regents in December 2009 approved a new academic policy that requires incoming freshman undergraduates to have completed four years of high school math. The requirement applies to student applicants who entered ninth grade in Fall 2011 (Seniors during 2014-2015). The coursework must include Algebra I, Geometry, and Algebra II. Students who complete Algebra II before their senior year must also complete the fourth-year math requirement. They can do so by taking a course during their senior year that is intensive in algebra and expands on algebra foundations developed during Algebra II. The University System of Maryland is comprised of: Bowie State University; Coppin State University; Frostburg State University; Salisbury University; Towson University; University of Maryland, Baltimore; University of Maryland, Baltimore County; University Center for Environmental Science; University of Maryland, College Park; University of Maryland, Eastern Shore; University of Maryland, University College; and University of Baltimore. |

2 Unless otherwise determined, districts may use the Geometry assessment as a means to satisfy the CCR assessment requirement for 11th grade students taking Geometry. Please note that a score of 4 or higher on the Geometry assessment does not indicate readiness for college-level credit-bearing mathematics coursework. |
Frequently Asked Questions

English Language Arts (ELA) Graduation and College and Career Readiness Requirements

Please refer questions to:

Ms. Ava B. Spencer
Coordinator of English Language Arts
Maryland State Department of Education
Division of Curriculum, Research, Assessment and Accountability
Telephone: 410.767.0830
Email: ava.spencer@maryland.gov
**MSDE ELA Graduation Requirements**

**Questions Related to:**

Maryland Education Article, Annotated Code of Maryland

§ 7-205.1. High school curriculum and graduation requirements

(b) Assessment of students; transition and other courses Section (2) (ii) states:

“The implementation of transition courses or other instructional opportunities required under subparagraph (i) of this paragraph:

1. Shall include an assessment or reassessment of the student after completion of the course; and
2. May not preclude or replace enrollment in a course otherwise required for graduation from high school.”

(1). **Question:**

Does a senior, deemed not college and career ready in ELA via a CCR assessment administered at the end of the 11th grade, need to enroll in an ELA transition course during the senior year if enrollment in the transition course would preclude the student from taking a course required for graduation?

**Answer:**

No, if there is no room for additional courses in a student’s school schedule, then the student is not required to enroll in an English transition course in the 12th grade.

(2). **Question:**

Does a senior, deemed not college and career ready in ELA via a CCR assessment administered at the end of the 11th grade, need to be provided other instructional opportunities beyond the school day in order to satisfy the requirements of the law, if the student cannot fit a transition course into his/her schedule?

**Answer:**

No, transition courses or other instructional opportunities should take place during the regular school day. The statute states that a transition course may not “replace” a course needed to graduate. Thus, if a student needs credits in English Language Arts or in math to graduate, transition courses in those content areas cannot be used to fulfill the regular English Language Arts or math credits needed to graduate. The transition course or instructional opportunity must be in addition to the English or math course needed for graduation, by adding time spent and content addressed.

The statute states that a transition course may not “preclude” enrollment in a course needed to graduate. Thus, if a student needs specific courses to graduate, and cannot fit those courses and a transition course into the schedule, the student need not take the transition course. A transition course cannot get in the way of a student completing his regular graduation credit requirements.
Question Related to:
COMAR Regulation 13A.03.02.09 Diplomas and Certificates section B. (3)(c)

B. Maryland High School Diploma. Except as provided in Regulation 12 of this chapter, and in section C of this regulation, to be awarded a Maryland high school diploma a student shall:
(3) Satisfy one of the following:
   (c) Achieve a score as established by the department on department-approved substitute assessment for algebra, biology, English, and Government, aligned with the Maryland High School Assessments such as Advanced Placement examinations, SAT I, SAT II, ACT, and International Baccalaureate examinations;

(3). Question:
Can a student satisfy the English assessment graduation requirement using a means other than by earning a passing score on the Maryland High School Assessment for English or by successfully completing an English Bridge Plan?
Answer:
Yes, according to The Code of Maryland Regulations (COMAR) 13A.03.02.09.B.(3)(c), students can satisfy their English assessment graduation requirement using other exams approved by the MSDE including Advanced Placement (AP) English Language or English Literature score of 3 or higher, International Baccalaureate (IB) English A1 score of 5, or higher.

Additional ELA Requirements put into law by the College and Career Readiness and College Completion Act of 2013 (CCR)
General CCR Questions:

(4). Question:
Community colleges require students to earn minimum scores on Accuplacer in Reading, Writing and Sentence skills or on the Evidence-based Reading and Writing (EBRW) Section of the SAT before being permitted to take a college-level credit bearing English course. If a community college allows a high school student to take a college-level credit bearing English course, is the student considered to be college and career ready?
Answer:
Yes, if a community college allows a student to take a college-level credit bearing English course; however, taking and successfully completing a non-credit developmental English course at a community college does not necessarily mean a student has met the minimum assessment requirements to meet the CCR designation.
(5). Question:
Dual enrollment is listed as an option for Grade 11 Assessment, but is it dual enrollment for students completing a course in Grade 11 or 12? If the course is in lieu of another assessment, could an 11th grader take the credit-bearing course in the summer before the Junior or Senior year and have the class count?

**Answer:**
- College-level credit-bearing coursework can count toward the CCR designation. Students in grade 11 dually enrolled in a college-level credit-bearing English course do not need to take a CCR assessment.
- Students who are permitted by a local community college to take a college-level credit-bearing English course during the summer between their 11th and 12th grade year are considered to be CCR and would not be required to take a 12th grade English transition course or reassessment.
- Students in 12th grade and dually enrolled in a college-level credit-bearing English course are CCR and no transition course or reassessment is needed.

(6). Question:
Who will oversee the testing and the collection of data? If the plan includes the next course in the sequence with support (as indicated on the MSDE English Language Arts [ELA] and Mathematics Credit, Enrollment and Assessment Requirements charts), how will this information be gathered and analyzed?

**Answer:**
The MSDE oversees the testing administration of the state administered assessments that may be used for the CCR designation including Algebra II, and English 11. All other CCR assessment decisions are a district decision.

The MSDE will collect information from the local districts on CCR assessments and transition opportunities as part of data collections in the Office of Accountability. The information collected will be used to fulfill federal and state compliance reporting. Information will be available at the local district and state level to inform programmatic and policy decisions.

(7). Question:
Under what circumstances, if any, can a student be exempt from taking a Transition Course?

**Answer:**
A student who has a schedule that is already full with courses required for graduation, and has no room for additional courses in his/her schedule, is exempt from taking the transition course.

(8). Question:
CCR 12th grade reassessment options include the SAT and Advanced Placement English exams. Results from Advanced Placement Exams typically become available after schools have dismissed for the summer. Depending on when a 12th grade student takes the SAT, the results may also not be available until after schools dismiss for the summer. How will a student learn of their CCR designation if the CCR assessment results are not available until the summer?

**Answer:**
This is a district decision.
(9). Question:
If a student uses the SAT CCR assessment option instead of the English 11 CCR assessment option, and English 11 assessment results are tied to teacher performance, how will that affect the teacher?
Answer:
Not a State decision.

(10). Question:
How can comparisons be made between systems if a few systems opt for the SAT, some for the Accuplacer, and some for MHSA CCR Assessment option?
Answer:
Any comparisons between districts should be done by the districts themselves solely for the purposes of informing best practices. It is hoped that districts will use the analysis of data from the CCR assessments and transition courses to improve practices designed to help students achieve a CCR designation by the time they graduate from high school.

(11). Question:
Does allowing some districts to cover the cost for all of their students to take the SAT for CCR designation widen the equity gap?
Answer:
All districts have the option to cover the cost for all of their students to take the SAT. It is each district's decision whether to use the SAT as a CCR assessment for all students.

(12). Question:
If a system uses the SAT and a student is absent on the day of testing, what is used in its place?
Answer:
This is a district decision. Any of the other CCR assessment options could potentially be used.

(13). Question:
In an IB program, what is the HL and SL designation?
Answer:
HL is Honors Level and SL is Standard Level. While one is called “standard,” the test is a rigorous assessment of language skills and part of the IB program.

(14). Question:
The Accuplacer score as indicated on the MSDE English Language Arts (ELA) Credit, Enrollment and Assessment Requirements chart lists the following scores: Score of 79+ Reading, 6+ Writing, and 90+ Sentence Skills. Can those scores be combined and averaged?
Answer:
No, the listed scores are minimum scores for each assessment. These scores cannot be combined or averaged.

(15). Question:
English 10 and 11, ACT, AP, and IB all require essays; the SAT is optional. Is the SAT essay required to determine CCR status? Writing is a pivotal skill which perhaps should be scored. There will be a great discrepancy among systems when some use
assessments where the essays are required.

Answer:
The assessments and cut scores listed are accepted “as is.” It is up to the district to determine whether the test they choose to administer has an essay.

(16). Question:
For the ACT, do students need to have a 21 or higher on the English and Writing subtests; the English and Reading subtests; or the English, Reading, and Writing subtests? Is the writing piece optional?

Answer:
The student must achieve an average score of 21 or higher on English and Reading.

(17). Question:
Since there are additional instructional opportunities outside the regular English class, are there additional situations in which a student would be exempt from taking an ELA Transition Course? Unlike math where conceivably the student could not fit additional coursework in their schedule, in English, if the additional instructional opportunities are outside the regular school day, how would there be justification for a waiver?

Answer:
Transition courses or other instructional opportunities should take place during the regular school day and may not preclude or replace enrollment in a course otherwise required for graduation from high school.

Students not designated college and career ready by the end of the 11th grade must participate in one of the following:

- ELA transition course, or
- Transition course articulated with a college, or
- Other ELA instructional opportunity, such as:
  - ELA module
  - Online ELA course
  - Hybrid ELA course

(18). Question:
For a school that offers the IB Program, knowing that the students have to score a 4 or higher on the IB exam, which exam determines CCR since there are multiple exams given through IB?

Answer:
Language A: Literature SL or HL
Language A: Language & Literature SL or HL
Language B is a second language proficiency assessment; therefore, it is not listed for CCR determination.

Students must achieve a score of 4 or higher on one of the English-related IB exams.

(19). Question:
Can we have the students enroll in regular English during the first semester and enroll in an English course offered by the community college for the second semester? Will this cover the transition course because it would be outside the regular English classroom?

Answer:
Yes, if the English course is on a semester schedule, and the students are receiving the entire English 12 course in the first semester.
Please refer questions to:

Ms. Debra L. Ward
Coordinator of Mathematics
Maryland State Department of Education
Division of Curriculum, Research, Assessment and Accountability
Telephone: 410.767.0355
Email: debra.ward@maryland.gov
Questions Related to:
Maryland Education Article, Annotated Code of Maryland
§ 7-205.1. High school curriculum and graduation requirements
   (b) Assessment of students; transition and other courses
Section (2) (ii) states:
“The implementation of transition courses or other instructional opportunities required under subparagraph
(i) of this paragraph:
3. Shall include an assessment or reassessment of the student after completion of the course; and
4. May not preclude or replace enrollment in a course otherwise required for graduation from high
school.”

(1). Question:
Does a senior, deemed not college and career ready in mathematics via a CCR assessment
administered at the end of the 11th grade, need to enroll in a mathematics transition course during
the senior year if enrollment in the transition course would preclude the student from taking a
course required for graduation?
Answer:
No, if there is no room for additional courses in a student’s school schedule, then the student is not required
to enroll in a mathematics transition course in the 12th grade.

(2). Question:
Does a senior, deemed not college and career ready in mathematics via a CCR assessment
administered at the end of the 11th grade, need to be provided other instructional opportunities
beyond the school day in order to satisfy the requirements of the law, if the student cannot fit a
transition course into his/her schedule?
Answer:
No, transition courses or other instructional opportunities should take place during the regular school day.
The statute states that a transition course may not “replace” a course needed to graduate. Thus, if a
student needs credits in English Language Arts or in mathematics to graduate, transition courses in those
content areas cannot be used to fulfill the regular English Language Arts or mathematics credits needed to
graduate. The transition course or instructional opportunity must be in addition to the English or
mathematics course needed for graduation, by adding time spent and content addressed.

The statute states that a transition course may not "preclude" enrollment in a course needed to graduate.
Thus, if a student needs specific courses to graduate, and s/he cannot fit those courses and a transition
course into his schedule, s/he need not take the transition course. A transition course cannot get in the way
of a student completing regular graduation credit requirements.
(3). Question:
All Maryland community colleges allow students who earn a score of 45+ on the College-Level Mathematics Accuplacer or a score of 530 or higher on the mathematics portion of the SAT to take designated college-level credit-bearing mathematics courses. If a community college allows a high school student to take a college-level credit-bearing mathematics course, is the student considered to be college and career ready?

Answer:
Yes, if a community college allows a student to take a college-level credit-bearing mathematics course; however, taking and successfully completing a non-credit developmental mathematics course at a community college does not necessarily mean a student is college and career ready.

(4). Question:
Dual enrollment is listed as an option for Grade 11 Assessment, but is it dual enrollment for students completing a course in Grade 11 or 12? If the course is in lieu of another assessment, could an 11th grader take the credit-bearing course in the summer before Junior or Senior year and have the class count?

Answer:
- College-level credit-bearing coursework can count toward the CCR designation. Students in grade 11 dually enrolled in a college-level credit-bearing mathematics course do not need to take a CCR assessment.
- Students who are permitted by a local community college to take a college-level credit-bearing mathematics course during the summer between their 11th and 12th grade year are considered to be CCR and would not be required to take a 12th grade mathematics transition course or reassessment.
- Students in 12th grade dual enrolled in a college-level credit-bearing mathematics course are CCR and no transition course or reassessment is needed.

(5). Question:
Who will oversee the testing and the collection of data? If the plan includes the next course in the sequence with support (as indicated on the MSDE English Language Arts (ELA) and Mathematics Credit, Enrollment and Assessment Requirements charts), how will this information be gathered and analyzed?

Answer:
The MSDE oversees the testing administration of the state administered assessments that may be used for the CCR designation including Algebra II, and English 11. All other CCR assessment decisions are a district decision.

The MSDE will collect information from the local districts on CCR assessments and transition opportunities as part of data collections in the Office of Accountability. The information collected will be used to fulfill federal and state compliance reporting. Information will be available at the local district and state level to inform programmatic and policy decisions.

(6). Question:
CCR 12th grade reassessment options include the SAT and Advanced Placement mathematics exams. Results from Advanced Placement Exams typically become available after schools have dismissed for the summer. Depending on when a 12th grade student takes the SAT, the results may also not be available until after schools dismiss for the summer. How will a student learn of the CCR designation if the CCR assessment results are not available until the summer?

Answer:
This is a district decision.
(7). Question:
If a student uses the SAT CCR assessment option instead of the MHSA Algebra II CCR assessment option, and MHSA Algebra II CCR assessment results are tied to teacher performance, how will that affect the teacher?
Answer:
This is a district decision.

(8). Question:
How can comparisons be made between systems if a few systems opt for the SAT, some for the Accuplacer, and some for MHSA CCR Assessment Option?
Answer:
Any comparisons between districts should be done by the districts themselves solely for the purposes of informing best practices. It is hoped that districts will use the analysis of data from the CCR assessments and transition courses to improve practices designed to help students achieve a CCR designation by the time they graduate from high school.

(9). Question:
Does allowing some districts to cover the cost for all of their students to take the SAT for CCR designation widen the equity gap?
Answer:
Districts have the option to cover the cost for all of their students to take the SAT. It is each district’s decision whether to use the SAT as a CCR assessment for all students.

(10). Question:
If a system uses the SAT and a student is absent on the day of testing, what is used in its place?
Answer:
This is a district decision. Any of the other CCR assessment options could potentially be used.

(11). Question:
There is a great deal of confusion over whether or not Geometry can be used as a college and career ready test for grade 11. If it can, will it count for CCR if the student scores a 4 or 5?
Answer:
Section 7-205.1b.1 of the Annotated Code of Maryland (https://www.lexisnexis.com/hottopics/mdcode/) stipulates that beginning with the 2015-2016 school year, all students shall be assessed using acceptable college placement cut scores no later than the 11th grade to determine whether the student is ready for college-level credit-bearing course work. To be ready for credit-bearing college-level coursework in Mathematics, students must possess the foundational skills acquired through successful completion of Algebra II. It is unlikely that a student who has not yet competed Algebra II would be ready for credit-bearing college-level mathematics coursework. LEAs may use the Geometry assessment as a CCR assessment for 11th grade students enrolled in Geometry in order to comply with the requirement that all students be assessed by the end of the 11th grade to determine readiness for college-level credit-bearing coursework in mathematics.

(12). Question:
Would earning a score of 4 or higher on the Geometry Maryland High School Assessment or the Algebra II Maryland High School Assessment result in a student being designated as CCR?
Answer:
A student who earns a score of 4 or higher on the Algebra II Maryland High School Assessment (MHSA) is considered CCR. A junior who earns a score of 4 or higher on the Geometry MHSA is considered CCR. The Geometry MHSA is an acceptable no-cost CCR assessment option for students taking Geometry during their junior year only.

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(13). Question: If a student fails to earn a Geometry credit by the end of the 11th grade and needs to re-take Geometry as a senior, can the Geometry assessment fulfill the CCR reassessment requirement?
Answer: Yes, if a student fails to pass Geometry by the end of junior year and is re-taking Geometry as a senior to earn the Geometry credit required for graduation, the Geometry assessment could be used to fulfill the CCR reassessment requirement.

(14). Question: COMAR 13A.03.02.09.C.(2) indicates that any student who has taken an-aligned Algebra I course prior to the 2016-2017 school year may meet the graduation requirements for Algebra I by passing Algebra I and taking the assessment aligned with the Algebra I course at least one time. Does this regulation mean that students only have to take one of the CCR assessments but will not be required to earn the designated cut score since the students only have to take the Algebra I assessment?
Answer: There is no connection between the graduation requirements associated with Algebra I and the CCR assessment requirements. Section 7-205.b.2 of the Annotated Code of Maryland stipulates that transition courses must be in place next year. “(i) Subject to subparagraph (ii) of this paragraph, the Department, in collaboration with local school systems and public community colleges, shall develop and implement, by the 2016-2017 school year, transition courses or other instructional opportunities to be delivered in the 12th grade to students who have not achieved college and career readiness by the end of the 11th grade.” COMAR 13A.03.02.09.C.(2) is in reference to earning a diploma; it is unrelated to meeting the CCR requirement. Algebra I does not satisfy the requirement for CCR designation; however, Algebra I does satisfy a graduation requirement.

(15). Question: Can a single mathematics course taken during the senior year satisfy both an LEA requirement that a student earn a 4th mathematics credit and mathematics transition course requirement if the same student was deemed not CCR at the end of the 11th grade?
Answer: In this situation, one senior year mathematics course can satisfy both local and state requirements. Enrollment in a 4th year is required, however only 3 credits of mathematics are required.

(16). Question: IB Exams are typically given during the 12th grade. Why are IB exams listed under CCR assessment options?
Answer: IB exams were listed to cover unusual circumstances. If a student took an IB exam as an 11th grader due to some unusual circumstance, the score earned could determine CCR.
2017 – 2018
Memorandum of Understanding
Between Maryland Association of Community Colleges and
Public School Superintendents Association of Maryland
Memorandum of Understanding

Between Maryland Association of Community Colleges and Public School Superintendents Association of Maryland

This Memorandum of Understanding ("MOU") is entered into this 1st day of August 2017, by and between the Maryland Association of Community Colleges and the Public School Superintendents Association of Maryland.

Background

WHEREAS, under the College and Career Readiness and College Completion Act of 2013 (herein referred to as "the CCR&CCA"), Annotated Code of Maryland, Education Article § 7-205, beginning in the 2015-2016 school year all students shall be assessed using acceptable college placement cut scores no later than 11th grade to determine whether the student is ready for college-level credit-bearing coursework in English Language Arts, Literacy and Mathematics.

WHEREAS, the Maryland State Department of Education (MSDE), in collaboration with local school systems and public community colleges, shall develop and implement by the 2016-2017 school year transition courses or other instructional opportunities to be delivered in the 12th grade to students who have not achieved college and career readiness by the end of the 11th grade.

WHEREAS, the implementation of transition courses or other instructional opportunities shall include an assessment or reassessment of the student after completion of the course and may not preclude or replace enrollment in a course otherwise required for graduation from high school.

NOW THEREFORE, by the signatures below, the individuals representing their respective organizations acknowledge in this Memorandum of Understanding (herein referred to as "MOU") that after extensive review and collaboration, the parties agree to the following criteria relating to executing their responsibilities under the provisions of the CCR&CCA as identified above.
I. College and Career Readiness Criteria and Assessment. A high school junior or senior student to be deemed as college and career ready must meet one of the following criteria:

<table>
<thead>
<tr>
<th>11th Grade</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English Language Arts (ELA)</strong></td>
<td><strong>English 10</strong> score of Level 4 or 5 satisfies the CCR determination</td>
</tr>
<tr>
<td><strong>English 11</strong> score of Level 4 or 5</td>
<td><strong>Old SAT Score of 500 or greater Evidence-based Reading &amp; Writing (EBRW) Section</strong></td>
</tr>
<tr>
<td><strong>PARCC</strong></td>
<td><strong>Score of 21 or greater Average of English Test &amp; Reading Test scores</strong></td>
</tr>
<tr>
<td><strong>SAT</strong></td>
<td><strong>English Language &amp; Composition Or English Literature &amp; Composition</strong></td>
</tr>
<tr>
<td><strong>ACT</strong></td>
<td><strong>Exam Score of 3, 4, or 5</strong></td>
</tr>
<tr>
<td><strong>AP</strong></td>
<td><strong>Lang. A: Lit, SL or HL Or Lang. A: Lang. &amp; Lit. SL or HL Grade 4 or above on one or more</strong></td>
</tr>
<tr>
<td><strong>IB</strong></td>
<td><strong>Reading 79+ Writing 6+ &amp; Sentence Skills 90+</strong></td>
</tr>
<tr>
<td><strong>ACCUPLACE</strong></td>
<td><strong>Admission to and enrollment in a Maryland IHE’s appropriate ELA college credit-bearing course. Existing local agreements between LEAS and community colleges or CCR are accepted.</strong></td>
</tr>
<tr>
<td><strong>Dual Enroll.</strong></td>
<td><strong>Current research recommends using a student’s high school GPA as a prime indicator for college readiness. The decision to do so requires agreement between the community college and the local school system, fully recognizing that those agreements may differ until further research is completed. Maryland’s community colleges will research this topic further during the ’17-’18, K-12 school year.</strong></td>
</tr>
<tr>
<td><strong>GPA</strong></td>
<td></td>
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</tbody>
</table>

| **Math** | **Algebra II** Score of Level 4 or 5 For 11th graders enrolled in Geometry, a score of Level 4 or 5 on PARCC Geometry satisfies the CCR determination |
| **Old SAT Score of 500 or greater Mathematics Section** | **Score of 21 or greater on Mathematics Test** |
| **New SAT Score of 530** | **Calculus AB Exam Score of 3, 4, or 5** |
| **Calculus BC Statistics** | **Math Studies Math SL Math HL Further Math Grade 4 or above on one or more** |
| **Further Math College level Mathematics test scores of 45+** | **Admission to and enrollment in a Maryland IHE’s appropriate math college credit bearing course. Existing local agreements between LEAs and community colleges or CCR are accepted.** |

* The Geometry assessment may be used as a no-cost CCR assessment for 11th grade students enrolled in Geometry. Eleventh grade students who earn a score of 4 or higher on the Geometry assessment are not required to take a mathematics transition course or senior year reassessment.

**This satisfies the CCR designation for school year 2017-2018. Further research is being done to determine if additional years will be approved.**
There are several college majors or pathways that may require a score higher than the minimal college readiness scores identified in the above chart. These majors are in the Science and Math fields, for example, an Associates of Science and Engineering degree requires a strong Math background. The minimally accepted indicated scores for those majors are as follows:

<table>
<thead>
<tr>
<th>Accuplacer</th>
<th>SAT (new)</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>55+ College Level Math</td>
<td>570</td>
<td>24</td>
</tr>
</tbody>
</table>

In the case where a student achieves a score in any of the above instruments that meets minimal college readiness levels but falls below the recognized readiness levels for specific majors as describe above, that student may be required to take credit-bearing, pre-requisite coursework.

Numerous LEAs have long standing local agreements with their community colleges that move students to credit-bearing coursework at their community colleges. These local agreements vary in scope based on past experiences ranging from acceptance of a certain level GPA with coursework review, to academic performance on a specific level of high school coursework.

This MOU recognizes the validity of these local agreements without specification of each individual agreement. Local agreements can be extended at the discretion of the community college and the LEA.

2. Ineligible. If a student is deemed not college and/or career ready (hereafter "CCR") at the end of 11th grade, the student is required to meet the criteria as established in the chart below in order to be eligible for dual enrollment:

<table>
<thead>
<tr>
<th>Senior Coursework</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>English Language Arts (ELA)</td>
<td>Complete an ELA transition course or an additional ELA &quot;instructional opportunity&quot; (online, hybrid, module, etc.) in preparation for re-assessment OR Enroll in a transition course articulated with a community college. These articulated college courses include, but are not limited to, Developmental English, courses approved by the community college as sufficient preparation for college, or courses that are taught by community college faculty.</td>
<td></td>
</tr>
<tr>
<td>MATH</td>
<td>Complete a math transition course or an additional math &quot;instructional opportunity&quot; (online, hybrid, module, etc.) in preparation for re-assessment OR Enroll in a transition course articulated with a community college</td>
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</tr>
</tbody>
</table>
3. **Reassessment.** Reassessment criteria are identified below:

<table>
<thead>
<tr>
<th>English Language Arts (ELA)</th>
<th>Summative Course Assessment (externally validated by local community college)</th>
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<tbody>
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<td></td>
<td>OR</td>
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<tr>
<td></td>
<td>PARCC 11</td>
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<td></td>
<td>OR</td>
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<tr>
<td></td>
<td>SAT/ACT</td>
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<td></td>
<td>OR</td>
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<tr>
<td></td>
<td>Accuplacer</td>
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<td></td>
<td>OR</td>
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<td></td>
<td>AP Test</td>
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<td></td>
<td>OR</td>
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<td></td>
<td>IB Test</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>MATH</th>
<th>Summative Course Assessment (externally validated by local community college)</th>
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<tbody>
<tr>
<td></td>
<td>OR</td>
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<tr>
<td></td>
<td>PARCC Algebra II</td>
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<td>OR</td>
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<td></td>
<td>SAT/ACT</td>
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<td>AP Test</td>
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<td>OR</td>
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<td></td>
<td>IB Test</td>
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</table>

4. **Exception.** If a student is determined to be college-ready in mathematics prior to 11th grade, all CCR requirements have been met for mathematics. However, students entering 9th grade class of 2014-2015 school year shall enroll in a mathematics course in each year of high school that the student attends, up to a maximum of four years of attendance, unless in the 5th or 6th year a mathematics course is needed to meet a graduation requirement.

5. **Career and Technology Programs.** For students enrolled in Career and Technology Programs to be deemed as college and career ready they must meet the following criteria:

   Senior Year Coursework - An appropriate transition course or other instructional opportunity consistent with the completion of a State Approved Career and Technology Education Program of Study.
Reassessment- Technical Skill Assessment recognized by MSDE leading to a license or an industry certification.

This MOU expires June 30, 2018. The parties agree to annually review this MOU to provide modifications as may be deemed relevant in accordance with changes in the law.

Maryland Association of Community Colleges

Bernard J. Sadusky, Ed.D.
Executive Director

Public School Superintendents Association of Maryland

Dr. D’Ette W. Devine
President