The following programs/courses, indicated by a Career-Technical Articulation Number (CTAN), are eligible for granted college credit at state institutions of higher education for (CT)² approved programs/courses at adult career-technical education institutions. In addition, the following courses, indicated by a Career-Technical Articulation Number (CTAN), are eligible for transfer among approved programs/courses at state institutions of higher education.

<table>
<thead>
<tr>
<th>CTEMS004 – Paramedic</th>
<th>Credits: 30 Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advising Notes: An EMS training program for a certificate to practice as a paramedic shall be in accordance with division 4765.16 of the Revised Code shall require all students complete an anatomy and physiology course as a prerequisite for admission into the EMS training program for a certificate to practice as a paramedic. The EMS training program shall be conducted in accordance with the national EMS education standards approved by the National Highway Traffic Safety Administration (NHTSA), the education standards approved by the board, and the scope of practice set forth in rule 4765-17-04 of the Ohio Administrative Code. The national EMS education standards approved by NHTSA and the education standards approved by the board can be found at <a href="http://www.ems.ohio.gov/ems_education.stm">http://www.ems.ohio.gov/ems_education.stm</a> (click on 03/19/2013 Approved Curriculum Standards). At the conclusion of the paramedic training program, the student will demonstrate entry level competency in the affective, psychomotor and cognitive domains related to each of the following areas of instruction. Submitted course work must include proof of laboratory and clinical components. Prerequisite: Current Ohio Paramedic certification</td>
<td></td>
</tr>
</tbody>
</table>

Each CTAN identifies the learning outcomes that are equivalent or common in introductory technical courses. In order for students to be able to receive credit under these agreements, the career-technical programs and the state institutions of higher education must document that their course/program content matches the learning outcomes in the CTANs. In accordance with Ohio Revised Code 3333.162, industry standards and certifications provide documentation of student learning. Recognized industry standards are expectations established by business, industry, state agencies, or professional associations. These standards define training program curricular requirements, establish certification or licensure criteria, and often serve as the basis for program accreditation.

**Requirements and Credit Conditions:**

1. The receiving institution must have a comparable program, major, or courses that have been approved through submission to the Ohio Board of Regents (CT)² approval process for the CTANs listed in this document.
2. Credits apply to courses in the specified technical area at Ohio’s public institutions of higher education, provided that the institution offers courses in the specific technical area. In the absence of an equivalent course, and when the institution offers the technical
program, the receiving institution will guarantee to grant and apply an equivalent credit value of the Career-Technical Articulation Number (CTAN) toward the technical requirements of the specific degree/certificate program.

3. The applicant must provide proof to the receiving institution that she/he completed a course or program that has been approved through the (CT)² approval process and that she/he holds the appropriate credential or has passed the end-of-program assessment.

4. A career-technical student seeking credit under the terms of this CTAG must apply and be accepted to the college within the currency of the industry certificate or license.

5. A career-technical student who meets all eligibility criteria will receive the credit hour value for the comparable course(s) as offered at the receiving state institution of higher education.

6. The admission requirements of individual institutions and/or programs are unaffected by the implementation of (CT)² outcomes.

7. The transfer of credit through this CTAG will not exempt a student from the residency requirements at the receiving institution.

CTEMS004 – Paramedic

General Course Description: Paramedic curriculum provides specialized subject matter, laboratory, clinical and field experiences designed to prepare individuals to provide advanced life support in the pre-hospital phase of an emergency. Instruction includes patient assessment, trauma-triage, advanced airway management, cardiac management, ECG monitoring and electrical intervention, defibrillation, intravenous, intramuscular, and subcutaneous administration of medications, and other invasive procedures, delivery and newborn care, in-depth study of the pathophysiology of illness and injuries. The personnel trained may be members of fire departments, police departments, or other agencies that are involved in the emergency treatment and rescue of people.

Credits: 30 Semester Hours

Learning Outcomes:

Outcomes marked with an asterisk are essential and must be taught.

Note: In an effort to limit the size of the CTAG, listed outcomes summarize the specific behavioral objectives of the Paramedic training course. For greater detail the reader is referred to [http://www.ems.ohio.gov/ems_education.stm](http://www.ems.ohio.gov/ems_education.stm) (click on 03/19/2014 Approved Curriculum Standards). Paramedic students will need to know all material within the paramedic curriculum as well as that of the advanced EMT, EMT and emergency medical responder.

(1) Preparatory;*
(2) Anatomy and physiology;*
(3) Medical terminology;*
(4) Pathophysiology;*
(5) Life span development;*
(6) Public health;*
(7) Pharmacology;*
(8) Airway management, respiration, and artificial ventilation;*
(9) Assessment;*
(10) Medicine, to include chest compression assist devices;*
(11) Shock and resuscitation;*
(12) Trauma, to include trauma triage determination;*
(13) Special patient populations;*
(14) EMS operations.*
### Paramedic Panel Participants

#### April 2014

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuck Sowerbrower</td>
<td>Sinclair Community College</td>
</tr>
<tr>
<td>Dan Beil</td>
<td>Cuyahoga Community College</td>
</tr>
<tr>
<td>Janice Evans</td>
<td>University of Cincinnati</td>
</tr>
<tr>
<td>Helen Newland</td>
<td>Hocking College</td>
</tr>
<tr>
<td>Lisa Nickles</td>
<td>Rhodes State College</td>
</tr>
<tr>
<td>Bryan Spangler</td>
<td>Central Ohio Technical College</td>
</tr>
</tbody>
</table>

*Revisions and Updates Provided by Chuck Sowerbrower, Sinclair Community College, 2014*
The Paramedic (formerly EMT – Paramedic) CTAG originated in 2008 with work from the following panel participants:

**Faculty and Teachers**

John Blauch, EMS Program Manager, Auburn Career Center  
Kevin Edmond, Lakeland Community College  
Justin Eccleston, EMT Paramedic and Firefighter Instructor, Owens Community College  
Tonya Fisher, Four County Career Center  
Bruce Fugate, Program Director, Southern State Community College  
Erna Holland, Coordinator of Public Safety, C-TEC Adult Education Center  
Michele Johnson, Chair School of Public Safety and Emergency Preparedness, Owens Community College  
Roy Jones, Instructor Adult and High School Galia Jackson Vinton County Career Center  
Debbie Lierl, Cincinnati State Community and Technical College  
David Miramontes MD, Program Medical Director, Owens Community College  
Linda Mirarchi, EMS Education Coordinator, Department of Public Safety  
Bill Montrie, EMM Certification Coordinator, Owens Community College  
Helen Newland, EMS Coordinator, Hocking College  
Tom Pack, Director CEP and EMT and Firefighter Instructor, Owens Community College  
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Susie Vigh, EMT Program Instructor, Polaris Career Center

**Contributors**

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