## General Education Requirements – AS (40 credits)

<table>
<thead>
<tr>
<th>√</th>
<th>Course#</th>
<th>Course Name</th>
<th>Cr.</th>
<th>Req.</th>
<th>Pre-requisites</th>
<th>Sem.</th>
<th>Code^</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ORE-103</td>
<td>College Success Strategies</td>
<td>3</td>
<td>X</td>
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<tr>
<td></td>
<td>COM-121</td>
<td>English Composition I</td>
<td>3</td>
<td>X</td>
<td>COM-061 or ESL-060 and COM-050/1 or ESL-050</td>
<td>All &amp; OL</td>
<td>WC/IL</td>
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<tr>
<td></td>
<td>COM-151*</td>
<td>Fundamentals of Speech</td>
<td>3</td>
<td>X</td>
<td>COM-061 or ESL-060 and COM-050/1 or ESL-050</td>
<td>All &amp; OL</td>
<td>OC</td>
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<tr>
<td></td>
<td>IFT-110</td>
<td>Microcomputer Applications</td>
<td>3</td>
<td>X</td>
<td>MAT-020</td>
<td>All &amp; OL</td>
<td>TC</td>
</tr>
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<td>COM-141</td>
<td>Technical Writing</td>
<td>3</td>
<td>X</td>
<td>COM-121 or COM-122 (grade of C or higher)</td>
<td>ALL</td>
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</table>

### Humanities: 3 credits

Select 1 course from the following:

- **ART-111** Introduction to Drawing
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-061 or ESL-060 and COM-050/1 or ESL-050
  
  - Sem.: All
  
  - Code^: AU

- **ART-201** Art Appreciation
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-121 or COM-122
  
  - Sem.: All & OL
  
  - Code^: AU

- **COM-110** Introduction to Creative Writing
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-061 or ESL-060 and COM-050/1 or ESL-050
  
  - Sem.: All
  
  - Code^: AU

- **ENG-125** Introduction to Literature
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-121 or COM-122 (grade of C or higher)
  
  - Sem.: All
  
  - Code^: AU

- **PHI-271** Introduction to Philosophy
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-121 or COM-122
  
  - Sem.: All
  
  - Code^: AU

- **PHI-275** Introduction to Ethics
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-121 or COM-122
  
  - Sem.: Fall/Sp
  
  - Code^: AU

### Mathematics: 8 credits

- **MAT-220** Calculus I
  
  - Cr.: 4
  
  - Req.: X
  
  - Pre-requisites: MAT-180 or placement by assessment
  
  - Sem.: Fall
  
  - Code^: QR/CA

- **MAT-221** Calculus II
  
  - Cr.: 4
  
  - Req.: X
  
  - Pre-requisites: MAT-220
  
  - Sem.: Sp
  
  - Code^: QR/CA

### Natural/Physical Sciences: 8 credits (Select one complete sequence from BIO or CHE)

Select 1 course from the following:

- **BIO-150** Biology I
  
  - Cr.: 4
  
  - Req.: X
  
  - Pre-requisites: MAT-030, COM-061 or ESL-060, COM-050/1 or ESL-050, CHE-120 or high school chemistry with a “C” or better
  
  - Sem.: All
  
  - Code^: SR

- **CHE-150** Chemistry I
  
  - Cr.: 4
  
  - Req.: X
  
  - Pre-requisites: CHE-120 or high school chemistry with a “C” or better, MAT-110 with a “C” or better (for MA - 150)
  
  - Sem.: Fall
  
  - Code^: SR

Select 1 course from the following that will complete the sequence:

- **BIO-155** Biology II
  
  - Cr.: 4
  
  - Req.: X
  
  - Pre-requisites: BIO-150 with a “C” or better
  
  - Sem.: Sp
  
  - Code^: SR

- **CHE-155** Chemistry II
  
  - Cr.: 4
  
  - Req.: X
  
  - Pre-requisites: CHE-150, MAT-160 or MAT-180
  
  - Sem.: Sp
  
  - Code^: SR

### Social Sciences: 3 credits

Select 1 course from the following:

- **ANT-140** Anthropology
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-061 or ESL-060 and COM-050/1 or ESL-050
  
  - Sem.: All
  
  - Code^: CU

- **HIS-110** US History to 1877
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-061 or ESL-060 and COM-050/1 or ESL-050
  
  - Sem.: Fall
  
  - Code^: CU

- **HIS-115** US History since 1865
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-061 or ESL-060 and COM-050/1 or ESL-050
  
  - Sem.: Fall
  
  - Code^: CU

- **PSY-130** General Psychology
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-061 or ESL-060 and COM-050/1 or ESL-050
  
  - Sem.: All & OL
  
  - Code^: CU

- **SOC-130** Sociology
  
  - Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: COM-061 or ESL-060 and COM-050/1 or ESL-050
  
  - Sem.: All & OL
  
  - Code^: CU

### Elective: 3 credits (Select 1 course with following prefix: ART, ENG, HUM, MUS, PHI, THE, ANT, HIS, POS, PSY, SOC or BUS-200/201)

- Cr.: 3
  
  - Req.: X
  
  - Pre-requisites: See catalog
  
  - Sem.: Varies

*Sections of these courses offered in the Honors Program, check [http://www.racc.edu/Academics/Honors/courses.aspx](http://www.racc.edu/Academics/Honors/courses.aspx) for details.
# Program: Engineering Transfer AS

**Division:** Science/Math  
**Student:**  
**ID#:**

## MAJOR COURSES (15 credits)

<table>
<thead>
<tr>
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<th>Sem.</th>
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<tbody>
<tr>
<td></td>
<td>MAT-222</td>
<td>Calculus III</td>
<td>4</td>
<td>X</td>
<td>MAT-221</td>
<td>Fall</td>
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<td>MAT-280</td>
<td>Differential Equations</td>
<td>3</td>
<td>X</td>
<td>MAT-222</td>
<td>Sp</td>
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<td>PHY-250</td>
<td>College Physics I</td>
<td>4</td>
<td>X</td>
<td>MAT-220, PHY-120 or high school physics with a “C” or better</td>
<td>Fall</td>
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<td>PHY-255</td>
<td>College Physics II</td>
<td>4</td>
<td>X</td>
<td>MAT-221, PHY-250</td>
<td>Sp</td>
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## ELECTIVES (5 credits)

<table>
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^Code

This course fulfills the Core Competency for:

- WC/IL: Written Communication/Information Literacy
- OC: Oral Communication
- QR/CA: Quantitative Reasoning/Critical Analysis
- CU: Cultural Understanding
- AU: Aesthetic Understanding
- SR: Scientific Reasoning
- TC: Digital/Technical Competence

**Recommended Electives:**

- BIO 150 Biology I
- BIO 155 Biology II
- BIO 250 Anatomy and Physiology I
- BIO 255 Anatomy and Physiology II
- CHE 150 Chemistry I
- CHE 155 Chemistry II
- CHE 250 Organic Chemistry I
- ENV 130 The Environment
- MET 110 Manufacturing Fundamentals
- MET 140A Programmable Logic Controllers I
- MET 140B Programmable Logic Controllers II
- PRG 100 Introduction to Computer Programming

Or other course approved by the Assistant Dean for Science/Math Division

**Transfer Information:**

**Advisor’s Contact Information:**

- **Name:** Dr. Narayanan Kamprath  
- **Phone:** 610-372-4721, ext. 5145  
- **Office:** B404  
- **E-Mail:** nkamprath@racc.edu

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Updated: March 2015  
All = Fall, Spring and Summer;  
OL= Online