

|          |                            | ineering Transfer AS 60 c                                | redits  |          | Division: Science/Ma   |                |      |
|----------|----------------------------|--|---------|----------|--|----------------|------|
| Student: |                            |  |         |          | italog Yr:   | -              |      |
|          |                            |  |         |          |  | 19-2020        |      |
| /        | Course#                    | Course Name  | Cr.     | Req.     | IREMENTS – AS (40 credits)<br>Pre-requisites   | Sem.           | Code |
|          | ORI-103*                   | College Success Strategies                               | 3       | X        |  | All & OL       | Coue |
|          | COM-121 *                  | English Composition I                                    | 3       | X        | COM-098 or ESL-050 and ESL-060   | All & OL       | WC/  |
|          | COM-151*                   | Fundamentals of Speech                                   | 3       | X        | COM-098 or ESL-050 and ESL-060   | All & OL       | 00   |
|          | IFT-110*                   | Microcomputer Applications                               | 3       | X        | MAT-020  | All & OL       | тс   |
|          | COM-141 or<br>COM-221*     | Technical Writing(recommended) or<br>English composition | 3       | x        | COM-121 or COM-122 (grade of C or higher)  |                |      |
| IL       | JMANITIES: 3               | credits  |         |          |  |                |      |
|          | Select 1 cour              | rse from the following:                                  |         |          |  |                |      |
|          | ART-111                    | Introduction to Drawing                                  |         |          | COM-098 or ESL-050 and ESL-060   | All            | AU   |
|          | ART-201                    | Art Appreciation   |         |          | COM-121 or COM-122   | All & OL       | AU   |
|          | COM-110                    | Introduction to Creative Writing                         | 3       | x        | COM-098 or ESL-050 and ESL-060   | All            | AU   |
|          | ENG-125*                   | Introduction to Literature                               |         |          | COM-121 or COM-122 (grade of C or higher)  | All & OL       | AU   |
|          | PHI-271*                   | Introduction to Philosophy                               |         |          | COM-121 or COM-122   | All & OL       | AL   |
|          | PHI-275*                   | Introduction to Ethics                                   |         |          | COM-121 or COM-122   | All            | AU   |
| 1        | ATHEMATICS:                | 8 credits  |         | _        |  |                |      |
|          | MAT-220                    | Calculus I   | 4       | Х        | MAT-180** or placement by assessment   | F & OL         | QR/C |
|          | MAT-221                    | Calculus II  | 4       | Х        | MAT-220  | Sp             | QR/C |
| 1/       | ATURAL/PHYSI               | CAL SCIENCES: 8 credits (Select                          | one coi | mplete s | sequence from BIO or CHE)  |                | 1    |
|          | Select 1 cours             | e from the following:                                    |         |          |  |                |      |
|          | BIO-150                    | Biology I  |         |          | MAT-030, COM-098 or ESL-050 and ESL-060,<br>CHE-120 or high school chemistry with a C or<br>better                                   |                | SR   |
|          | CHE-150                    | Chemistry I  | - 4     | Х        | CHE-120 or high school chemistry with a "C"<br>better, MAT-110 with a "C" or better<br>(see advisor to discuss readiness for CHE-150 | Fall/Sp        | SR   |
|          | Select 1 cours             | e from the following that will comp                      | ete the | sequenc  | e:   |                |      |
|          | BIO-155                    | Biology II   |         |          | BIO-150 with a "C" or better   | Sp             | SR   |
|          | CHE-155                    | Chemistry II   | 4       | Х        | CHE-150 with a "C" or better, MAT-160 or<br>MAT-180  | Sp             | SR   |
| C        | DCIAL SCIENCES             |  |         |          |  |                | 1    |
|          | -                          | se from the following:                                   | 1       | 1        |  |                | -    |
|          | ANT-140                    | Anthropology   | -       |          | COM-098 or ESL-050 and ESL-060   | All & OL       | CU   |
|          | HIS-110                    | US History I   | 3       | x        | COM-098 or ESL-050 and ESL-060   | F/Su/OL        | CU   |
|          | HIS-115                    | US History II  |         |          | COM-098 or ESL-050 and ESL-060   | Sp & OL        | CU   |
|          | PSY-130*                   | General Psychology                                       |         |          | COM-098 or ESL-050 and ESL-060   | All & OL       | CU   |
|          | SOC-130*                   | Sociology  |         |          | COM-098 or ESL-050 and ESL-060   | All & OL       | CU   |
|          | ECTIVE: 3 credit<br>00/201 | s (Select 1 course with following                        | prefix: | ART, EN  | IG, HUM, MUS, PHI, THE, ANT, HIS, POS, P   | PSY, SOC or BL | JS-  |
|          |                            |  | 3       | х        | See catalog  | Varies         |      |

\*Sections of these courses offered in the Honors Program, check <u>https://www.racc.edu/academics/honors-program</u> for details.

\*\*Completion of both MAT 160 and MAT 165 will fulfill prerequisite or graduation requirement that requires MAT 180.
Online (OL) may not be offered every semester. Please check the schedule.



|   | Program: Engineering Transfer AS<br>Student: |                        |       |         | Division: Science/Math<br>ID#:                               |         |       |
|---|--|------------------------|-------|---------|--|---------|-------|
|   |  |                        | MAJOR | COURS   | SES (15 credits)   |         |       |
| ٧ | Course#                                      | Course Name            | Cr.   | Req.    | Pre-requisites   | Sem.    | Grade |
|   | MAT-222                                      | Calculus III           | 4     | Х       | MAT-221  | Fall/Su |       |
|   | MAT-280                                      | Differential Equations | 3     | х       | MAT-222  | Sp      |       |
|   | PHY-250                                      | College Physics I      | 4     | х       | MAT-220, PHY-120 or high school physics with a "C" or better | Fall    |       |
|   | PHY-255                                      | College Physics II     | 4     | Х       | MAT-221, PHY-250   | Sp      |       |
|   |  |                        | ELI   | ECTIVES | (5 credits)  |         |       |
| ٧ | Course#                                      | Course Name            | Cr.   | Req.    | Pre-requisites   | Sem.    | Grade |
|   |  |                        |       |         |  |         |       |
|   |  |                        |       |         |  |         |       |
|   |  |                        |       |         |  |         |       |
|   |  |                        |       |         |  |         |       |

| ^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 (OL)                      |  |  |  |
| MET 111  | Manufacturing Fundamentals                |  |  |  |
| MET 140A   | Programmable Logic Controllers I          |  |  |  |
| MET 140B   | Programmable Logic Controllers II         |  |  |  |
| PRG 100  | Introduction to Computer Programming (OL) |  |  |  |
| 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