



**ARTICULATION TRANSFER MATRIX BETWEEN  
SANTA FE COMMUNITY COLLEGE  
AND  
NORTHERN NEW MEXICO COLLEGE**



| SFCC AS General Engineering and Engineering Technology                             |   |   | NNMC BEng ElectroMechanical Engineering Technology   |   |   |
|--|---|---|--|---|---|
| <b>General Education Requirements - 28 credits</b>                                 |   |   | SFCC students who earn an AS degree in General Engineering as prescribed in this document will receive a minimum of 60 credits toward the BEng degree in Electromechanical Engineering Technology. Any deviation from this prescribed agreement will require appropriate approval from SFCC and/or NNMC. |   |   |
| <b>Area I. Communications - 6 credits</b>  |   |   |  |   |   |
| ENGL 111   | Composition and Rhetoric                        | 3 |  |   |   |
| ENGL 216   | Technical Writing                               | 3 |  |   |   |
|  |   |   | <b>Area II. Mathematics - 3 credits</b>  |   |   |
|  |   |   | ENGR 1121L   | Introductory Math for Engineering Applications I  | 3 |
|  |   |   | <b>Support Courses- 3 credit</b>   |   |   |
|  |   |   | ENGR 1122L   | Introductory Math for Engineering Applications II | 3 |
| <b>Area III. Laboratory Science - 4 credits</b>                                    |   |   | <b>Program Requirements (54 Credits)</b>   |   |   |
| CHEM 121/L   | General Chemistry I and General Chemistry I Lab | 4 |  |   |   |
|  |   |   | MET 302  | Strength and Properties of Materials              | 3 |
|  |   |   | MET 301  | Applied Mechanics II                              | 3 |
| <b>Area IV. Social/Behavioral Sciences - 3 credits</b>                             |   |   | MET 310  | Manufacturing Processes and Automation            | 3 |
| Social/Behavioral Sciences course  |   |   | EET 300/L  | Electrical Systems II with Lab                    | 3 |
| <b>Area V. Humanities - 3 credits</b>  |   |   | EET 400/L  | Control Systems and Instrumentation with Lab      | 3 |
|  |   |   | EMET 400   | Advanced Electro-Mechanical Design                | 3 |
| <b>Area VI. Fine Arts - 3 credits</b>  |   |   | MET 303  | Thermodynamics                                    | 3 |
|  |   |   | MET 317  | Fluid Mechanics                                   | 3 |
| <b>Additional NINE Credits- 9 credit</b>   |   |   | EMET 402   | Robotics  | 3 |
|  |   |   | MET 421  | Heat Transfer                                     | 3 |
| <b>Support Courses- 16 credit</b>  |   |   | ENGR 480   | Engineering Management and Project Management     | 3 |
| MATH 162   | Calculus I                                      | 4 | EMET 490   | Capstone (WIC)                                    | 3 |
| MATH 163   | Calculus II                                     | 4 |  |   |   |
| PHYS 161/L   | Calculus Physics I and Calculus Physics I Lab   | 4 |  |   |   |
| PHYS 162/L   | Calculus Physics II and Calculus Physics II Lab | 4 |  |   |   |
| <b>Core Requirements - 23 credits</b>  |   |   |  |   |   |
| ENGR 111   | Intro to Engineering                            | 3 |  |   |   |
|  |   |   |  |   |   |
| ENGR 160   | Engineering Graphics and Design                 | 3 |  |   |   |
| ENGR 212   | Engineering Statics                             | 3 |  |   |   |
| ENGR 215   | Engineering Programming using MATLAB            | 3 |  |   |   |
| ENGR 222/222L  | Engineering Circuit Analysis/&with Lab (5)      | 3 |  |   |   |
| MATH 267   | Applied Differential Equations                  | 3 |  |   |   |
| <b>Additional optional courses offered at SFCC required for some fields of</b>     |   |   |  |   |   |
| <i>Students must work closely with an adviser to select courses appropriate to</i> |   |   |  |   |   |
| CHEM 122/122L  | General Chemistry I/with lab                    | 4 |  |   |   |
| ELEC 122   | Digital Circuits                                | 4 |  |   |   |
| ENGR 221   | Dynamics  | 0 |  |   |   |
| ENGR 260/260L  | Mechanical Engineering Design/with Lab(4)       | 2 |  |   |   |
| MATH 264   | Calculus III                                    | 0 |  |   |   |
|  |   |   | <b>Transfer from SFCC AS Degree</b>  |   |   |
|  |   |   | <b>78</b>  |   |   |
|  |   |   | <b>Other SFCC transfer credits</b>   |   |   |
|  |   |   | <b>0</b>   |   |   |
|  |   |   | <b>Other NNMC BEng technical program requirements</b>  |   |   |
|  |   |   | <b>42</b>  |   |   |
| PHYS 263/263L  | Calculus Physics III/with Lab                   | 6 |  |   |   |
|  |   |   |  |   |   |
| <b>Total AS Credits</b>  |   |   | <b>Total Credit Hours</b>  |   |   |
| <b>78</b>  |   |   | <b>120</b>   |   |   |
| <b>Santa Fe Community College</b>  |   |   | <b>Northern New Mexico College</b>   |   |   |
| Valid through 2023   |   |   |  |   |   |
| Chair  | Date  |   | Chair  | Date  |   |
| Dean   | Date  |   | Dean   | Date  |   |
| VPAA   | Date  |   | VPAA   | DATE  |   |