www.vcsu.edu - catalog.vcsu.edu - 101 College St SW, Valley City, ND 58072 - 800-532-8641 - 701-845-7202

## **STEM Education Certificate**

This certificate allows the university to serve the needs of in-service teachers who seek a STEM Education credential. This online certificate is available to teachers both in and outside North Dakota. Through the teachers enrolled in the certificate, STEM education will reach students at the primary and secondary levels and prepare them for the world as it has become. VCSU's STEM certificate will enhance the curricular understandings of in-service teachers who may already have a master's degree or may decide later to expand the certificate into a Master's degree.

## **Elementary Focus**

| Code                                 | Title   | Credit |  |
|--------------------------------------|---|--------|--|
| Required Courses                     |   |        |  |
| STEM ED 655                          | STEM Curriculum and Methods in Elementary             | 3      |  |
| STEM ED 670                          | Design, Technology, and Engineering for<br>Elementary | 3      |  |
| STEM ED 671                          | Inquiry Based Thematic Instruction                    | 3      |  |
| STEM ED 680                          | Building Math   | 3      |  |
| or STEM ED 665vention and Innovation |   |        |  |
| Total Credits                        |   |        |  |

## **Secondary Focus**

| Code             | Title                       | Credits |  |
|------------------|-----------------------------|---------|--|
| Required Courses |                             |         |  |
| STEM ED 650      | STEM Curriculum and Methods | 3       |  |
| STEM ED 660      | Design for Engineering      | 3       |  |
| STEM ED 665      | Invention and Innovation    | 3       |  |
| STEM ED 680      | Building Math               | 3       |  |
| or STEM ED       | 682ngineering the Future    |         |  |
| Total Credits    | 12                          |         |  |