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DEGREE PROGRAM & LEVEL: Chemical Engineering, Bachelor of Engineering

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|---|-----------------|--------------------|------------|-------------------------|--------------------------|-------------------|------------|--------------|------------------------------|-------------|---------------|-----|-----|----------------|----|-------------|--------------|------------|-----------------------------|-----------------------------|--------------|-------------|-----------------------|
| Curriculum Map<br>for Chemical<br>Engineering                                       | 1841 1572, 1527 | Math 3705 Disc. 13 | CHEM 1515A | HEM 3719A GOOL GOO. CO. | HEM 3739A 37201. O'Sanic | CHEM 3740,1 and 2 | CHEM 3785A | PHYS 2610 m. | PHIL 2609 Text General Phys. | HIL 225 for | PHIL 220 Ems. | 7   | /   | $\overline{/}$ |    | CHEN 2850 C | HEV 2683 ar. | HEV 3771 K | CHEN 3786 T. Them. Eng. 74. | HEV 37851 " Renomena"   & 2 | CHEN 3787 T. | CHEN 37871. | CHEN 4815 Unit Ops. 1 |
| Course Cluster? (Y) Learning Outcome  | 7               | 7                  | <i>,</i> c | <i>,</i> c              | , c                      | Y                 | Y          | /~           | Υ Υ                          | γ Y         | Υ Υ           | 7 ~ | , 0 | /~             | /~ | <i>,</i> c  | <i>,</i> c   | <i>,</i> c | , 0                         | <i>,</i> c                  | , 0          | <i>,</i> c  | <i>,</i> c            |
| An ability to apply knowledge of math, science, and engineering                     | К               | А                  | К          | Α                       | S                        | S                 | S          | К            |                              |             |               |     |     | К              | К  | К           | А            | А          | А                           | А                           | А            | S           | S                     |
| An ability to design and conduct experiments, as well as analyze and interpret data |                 | К                  | К          | К                       | К                        | К                 | К          |              |                              |             |               |     |     |                |    |             |              |            |                             | А                           |              | S           |                       |
| An ability to design a system, component, or process to meet desired needs          |                 |                    |            |                         |                          |                   |            |              |                              |             |               |     |     |                | К  |             | К            | К          | К                           | Α                           |              |             | S                     |
| An ability to function on multidisciplinary teams                                   |                 |                    | К          | К                       | К                        | К                 | К          |              |                              |             |               |     |     |                |    |             |              |            |                             | А                           |              | S           |                       |

| stated here.                         | An ability to identify, formulate, and solve engineering problems  | А |  |  | К |   |   |   |   |   |   | К | К | К | А | А |   | А |   | S |
|--------------------------------------|--|---|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Learning Outcomes/Goals stated here. | An understanding of professional and ethical responsibility  |   |  |  |   | К | К | К |   |   | К |   |   |   |   |   |   |   |   |   |
| Learning Ou                          | An ability to communicate effectively  |   |  |  |   |   |   |   | К | К |   |   |   |   |   | А |   |   | А |   |
|                                      | The broad education<br>necessary to understand the<br>impact of engineering<br>solutions in global/societal<br>context |   |  |  |   | К | К | К |   |   |   |   |   |   |   |   |   |   |   | А |
|                                      | Recognition of the need to engage in life-long learning  |   |  |  |   |   |   |   |   |   |   | K |   | К | Α |   | Α |   | Α |   |
|                                      | Knowledge of contemporary issues   |   |  |  |   | К | К | К |   |   | К |   |   |   |   |   |   |   |   |   |
|                                      | An ability to use the technical skills, software, hardware, tools, and equipment for engineering practice              | К |  |  |   |   |   |   |   |   |   | К | А | А | А | А | А | А | S | S |

| CHEN 4880 & | CHEN 4882 P. | CHEN 48821 Dynamics | CHEN 4887 P. | CHEN 4888 P. | \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
|-------------|--------------|---------------------|--------------|--------------|--|
| S           | S            | S                   | S            | S            |  |
|             |              | S                   |              | S            |  |
| S           |              |                     | S            | S            |  |
|             |              |                     |              | S            |  |

KEY: K=knowledge/Comprehension; A=Application/Analysis; S=Synthesis/Evaluation

| S |
|---|
| S |

