**Curriculum Map: Integrated Major in Math and English – Applied Math Concentration**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Prerequisites** | **Goal (1)** |  **Goal (2)** |  **Goal (3)** |  **Goal (4)** | **Goal (5)** | **Goal (6)** |
|  |  |  |  |  |  |
| Econ 2001 | Beginning | Beginning |  |  |  |  |
| Econ 2002 | Beginning | Beginning |  |  |  |  |
| English 2367 |  |  |  |  | Intermediate |  |
| Math 1151 | Beginning | Beginning |  |  |  |  |
| Math 1152 | Beginning | Beginning |  |  |  |  |
| Math 1295 | Intermediate | Intermediate |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Core Courses in Concentration** |  |  |  |  |  |  |
| CSE 2111 | Beginning |  |  |  |  |  |
| Math 2153 | Intermediate | Intermediate |  |  |  |  |
| Math 2255  | Intermediate | Intermediate |  |  |  |  |
| Math 2568  | Intermediate | Intermediate |  |  |  |  |
| Math 3607  | Advanced | Advanced |  |  |  |  |
| Math 4530 or Stat 4201  | Advanced | Advanced |  |  |  |  |
| Stat 4202  | Advanced | Advanced |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Math/English Capstone Course** |  |  |  |  |  |  |
| Math/English 4420 |  | Advanced |  |  |  | Advanced |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Diversity in English Studies Courses (Choose one)** |  |  |  |  |  |  |
| English 4577.01 |  |  |  | Advanced |  |  |
| English 4580 |  |  |  | Advanced |  |  |
| English 4581 |  |  |  | Advanced |  |  |
| English 4582 |  |  |  | Advanced |  |  |
| English 4586 |  |  |  | Advanced |  |  |
| English 4587 |  |  |  | Advanced |  |  |
| English 4588 |  |  |  | Advanced |  |  |
| English 4589 |  |  |  | Advanced |  |  |
| English 4592 |  |  |  | Advanced |  |  |
| English 4597.01 |  |  |  | Advanced |  |  |
| English 4601 |  |  |  | Advanced |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Methods Course (Choose one)** |  |  |  |  |  |  |
| English 2270 |  |  | Intermediate |  |  |  |
| English 3379 |  |  | Intermediate |  |  |  |
| English 3398 |  |  | Intermediate |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **English Electives (Choose one at the 3000-level or above and choose three at the 4000-level or above. If English 2269 is used as a GE course then choose one additional English course at the 2000-level or above)** |  |  |  |  |  |  |
| English 2201 |  |  | Beginning | Beginning | Beginning |  |
| English 2201H |  |  | Beginning | Beginning | Beginning |  |
| English 2202 |  |  | Beginning | Beginning | Beginning |  |
| English 2202H |  |  | Beginning | Beginning | Beginning |  |
| English 2220 |  |  | Beginning | Beginning | Beginning |  |
| English 2220H |  |  | Beginning | Beginning | Beginning |  |
| English 2260 |  |  | Beginning | Beginning | Beginning |  |
| English 2260H |  |  | Beginning | Beginning | Beginning |  |
| English 2261 |  |  | Beginning | Beginning | Beginning |  |
| English 2261H |  |  | Beginning | Beginning | Beginning |  |
| English 2262 |  |  | Beginning | Beginning | Beginning |  |
| English 2262H |  |  | Beginning | Beginning | Beginning |  |
| English 2263 |  |  | Beginning | Beginning | Beginning |  |
| English 2264 |  |  | Beginning | Beginning | Beginning |  |
| English 2265 |  |  | Beginning | Beginning | Beginning |  |
| English 2266 |  |  | Beginning | Beginning | Beginning |  |
| English 2267 |  |  | Beginning | Beginning | Beginning |  |
| English 2268 |  |  | Beginning | Beginning | Beginning |  |
| English 2269 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270H |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2275 |  |  | Beginning | Beginning | Beginning |  |
| English 2276 |  |  | Beginning | Beginning | Beginning |  |
| English 2277 |  |  | Beginning | Beginning | Beginning |  |
| English 2280 |  |  | Beginning | Beginning | Beginning |  |
| English 2280H |  |  | Beginning | Beginning | Beginning |  |
| English 2281 |  |  | Beginning | Beginning | Beginning |  |
| English 2282 |  |  | Beginning | Beginning | Beginning |  |
| English 2290 |  |  | Beginning | Beginning | Beginning |  |
| English 2291 |  |  | Beginning | Beginning | Beginning |  |
| English 2296H |  |  | Beginning | Beginning | Beginning |  |
| English 3271 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3304 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3305 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3331 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3361 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3364 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3372 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3378 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3398 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3405 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3465 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3466 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3467S |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3468 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3597.03 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3662 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 4400 |  |  | Advanced | Advanced | Advanced |  |
| English 4513 |  |  | Advanced | Advanced | Advanced |  |
| English 4514 |  |  | Advanced | Advanced | Advanced |  |
| English 4515 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4521 |  |  | Advanced | Advanced | Advanced |  |
| English 4522 |  |  | Advanced | Advanced | Advanced |  |
| English 4523 |  |  | Advanced | Advanced | Advanced |  |
| English 4531 |  |  | Advanced | Advanced | Advanced |  |
| English 4533 |  |  | Advanced | Advanced | Advanced |  |
| English 4535 |  |  | Advanced | Advanced | Advanced |  |
| English 4540 |  |  | Advanced | Advanced | Advanced |  |
| English 4542 |  |  | Advanced | Advanced | Advanced |  |
| English 4543 |  |  | Advanced | Advanced | Advanced |  |
| English 4547 |  |  | Advanced | Advanced | Advanced |  |
| English 4549 |  |  | Advanced | Advanced | Advanced |  |
| English 4550 |  |  | Advanced | Advanced | Advanced |  |
| English 4551 |  |  | Advanced | Advanced | Advanced |  |
| English 4552 |  |  | Advanced | Advanced | Advanced |  |
| English 4553 |  |  | Advanced | Advanced | Advanced |  |
| English 4554 |  |  | Advanced | Advanced | Advanced |  |
| English 4555 |  |  | Advanced | Advanced | Advanced |  |
| English 4559 |  |  | Advanced | Advanced | Advanced |  |
| English 4560 |  |  | Advanced | Advanced | Advanced |  |
| English 4561 |  |  | Advanced | Advanced | Advanced |  |
| English 4562 |  |  | Advanced | Advanced | Advanced |  |
| English 4563 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.04 |  |  | Advanced | Advanced | Advanced |  |
| English 4565 |  |  | Advanced | Advanced | Advanced |  |
| English 4566 |  |  | Advanced | Advanced | Advanced |  |
| English 4567S |  |  | Advanced | Advanced | Advanced |  |
| English 4568 |  |  | Advanced | Advanced | Advanced |  |
| English 4569 |  |  | Advanced | Advanced | Advanced |  |
| English 4570 |  |  | Advanced | Advanced | Advanced |  |
| English 4571 |  |  | Advanced | Advanced | Advanced |  |
| English 4572 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4574 |  |  | Advanced | Advanced | Advanced |  |
| English 4575 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4578 |  |  | Advanced | Advanced | Advanced |  |
| English 4578H |  |  | Advanced | Advanced | Advanced |  |
| English 4579 |  |  | Advanced | Advanced | Advanced |  |
| English 4580 |  |  | Advanced | Advanced | Advanced |  |
| English 4581 |  |  | Advanced | Advanced | Advanced |  |
| English 4582 |  |  | Advanced | Advanced | Advanced |  |
| English 4583 |  |  | Advanced | Advanced | Advanced |  |
| English 4584 |  |  | Advanced | Advanced | Advanced |  |
| English 4585 |  |  | Advanced | Advanced | Advanced |  |
| English 4586 |  |  | Advanced | Advanced | Advanced |  |
| English 4587 |  |  | Advanced | Advanced | Advanced |  |
| English 4588 |  |  | Advanced | Advanced | Advanced |  |
| English 4589 |  |  | Advanced | Advanced | Advanced |  |
| English 4590.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.03H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.04H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.05H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.06H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.07H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.08H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.09H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4592 |  |  | Advanced | Advanced | Advanced |  |
| English 4595 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.02 |  |  | Advanced | Advanced | Advanced |  |
| English 5664 |  |  | Advanced | Advanced | Advanced |  |
| English 5710 |  |  | Advanced | Advanced | Advanced |  |
| English 5721 |  |  | Advanced | Advanced | Advanced |  |
| English 5722 |  |  | Advanced | Advanced | Advanced |  |
| English 5723 |  |  | Advanced | Advanced | Advanced |  |

**Curriculum Map: Integrated Major in Math and English – Math Education Concentration**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Prerequisites** | **Goal (1)** |  **Goal (2)** |  **Goal (3)** |  **Goal (4)** | **Goal (5)** | **Goal (6)** |
|  |  |  |  |  |  |
| Econ 2001 | Beginning | Beginning |  |  |  |  |
| Econ 2002 | Beginning | Beginning |  |  |  |  |
| English 2367 |  |  |  |  | Intermediate |  |
| Math 1151 | Beginning | Beginning |  |  |  |  |
| Math 1152 | Beginning | Beginning |  |  |  |  |
| Math 1295 | Intermediate | Intermediate |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Core Courses in Concentration** |  |  |  |  |  |  |
| CSE 2111 | Beginning |  |  |  |  |  |
| Math 2153 | Intermediate | Intermediate |  |  |  |  |
| Math 2255  | Intermediate | Intermediate |  |  |  |  |
| Math 2568  | Intermediate | Intermediate |  |  |  |  |
| Math 3345 | Advanced | Advanced |  |  |  |  |
| Math 4504 | Advanced | Advanced |  |  |  |  |
| Math 4530 or Stat 4201 | Advanced | Advanced |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Math/English Capstone Course** |  |  |  |  |  |  |
| Math/English 4420 |  | Advanced |  |  |  | Advanced |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Diversity in English Studies Courses (Choose one)** |  |  |  |  |  |  |
| English 4577.01 |  |  |  | Advanced |  |  |
| English 4580 |  |  |  | Advanced |  |  |
| English 4581 |  |  |  | Advanced |  |  |
| English 4582 |  |  |  | Advanced |  |  |
| English 4586 |  |  |  | Advanced |  |  |
| English 4587 |  |  |  | Advanced |  |  |
| English 4588 |  |  |  | Advanced |  |  |
| English 4589 |  |  |  | Advanced |  |  |
| English 4592 |  |  |  | Advanced |  |  |
| English 4597.01 |  |  |  | Advanced |  |  |
| English 4601 |  |  |  | Advanced |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Methods Course (Choose one)** |  |  |  |  |  |  |
| English 2270 |  |  | Intermediate |  |  |  |
| English 3379 |  |  | Intermediate |  |  |  |
| English 3398 |  |  | Intermediate |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **English Electives (Choose one at the 3000-level or above and choose three at the 4000-level or above. If English 2269 is used as a GE course then choose one additional English course at the 2000-level or above)** |  |  |  |  |  |  |
| English 2201 |  |  | Beginning | Beginning | Beginning |  |
| English 2201H |  |  | Beginning | Beginning | Beginning |  |
| English 2202 |  |  | Beginning | Beginning | Beginning |  |
| English 2202H |  |  | Beginning | Beginning | Beginning |  |
| English 2220 |  |  | Beginning | Beginning | Beginning |  |
| English 2220H |  |  | Beginning | Beginning | Beginning |  |
| English 2260 |  |  | Beginning | Beginning | Beginning |  |
| English 2260H |  |  | Beginning | Beginning | Beginning |  |
| English 2261 |  |  | Beginning | Beginning | Beginning |  |
| English 2261H |  |  | Beginning | Beginning | Beginning |  |
| English 2262 |  |  | Beginning | Beginning | Beginning |  |
| English 2262H |  |  | Beginning | Beginning | Beginning |  |
| English 2263 |  |  | Beginning | Beginning | Beginning |  |
| English 2264 |  |  | Beginning | Beginning | Beginning |  |
| English 2265 |  |  | Beginning | Beginning | Beginning |  |
| English 2266 |  |  | Beginning | Beginning | Beginning |  |
| English 2267 |  |  | Beginning | Beginning | Beginning |  |
| English 2268 |  |  | Beginning | Beginning | Beginning |  |
| English 2269 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270H |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2275 |  |  | Beginning | Beginning | Beginning |  |
| English 2276 |  |  | Beginning | Beginning | Beginning |  |
| English 2277 |  |  | Beginning | Beginning | Beginning |  |
| English 2280 |  |  | Beginning | Beginning | Beginning |  |
| English 2280H |  |  | Beginning | Beginning | Beginning |  |
| English 2281 |  |  | Beginning | Beginning | Beginning |  |
| English 2282 |  |  | Beginning | Beginning | Beginning |  |
| English 2290 |  |  | Beginning | Beginning | Beginning |  |
| English 2291 |  |  | Beginning | Beginning | Beginning |  |
| English 2296H |  |  | Beginning | Beginning | Beginning |  |
| English 3271 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3304 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3305 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3331 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3361 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3364 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3372 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3378 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3398 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3405 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3465 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3466 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3467S |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3468 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3597.03 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3662 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 4400 |  |  | Advanced | Advanced | Advanced |  |
| English 4513 |  |  | Advanced | Advanced | Advanced |  |
| English 4514 |  |  | Advanced | Advanced | Advanced |  |
| English 4515 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4521 |  |  | Advanced | Advanced | Advanced |  |
| English 4522 |  |  | Advanced | Advanced | Advanced |  |
| English 4523 |  |  | Advanced | Advanced | Advanced |  |
| English 4531 |  |  | Advanced | Advanced | Advanced |  |
| English 4533 |  |  | Advanced | Advanced | Advanced |  |
| English 4535 |  |  | Advanced | Advanced | Advanced |  |
| English 4540 |  |  | Advanced | Advanced | Advanced |  |
| English 4542 |  |  | Advanced | Advanced | Advanced |  |
| English 4543 |  |  | Advanced | Advanced | Advanced |  |
| English 4547 |  |  | Advanced | Advanced | Advanced |  |
| English 4549 |  |  | Advanced | Advanced | Advanced |  |
| English 4550 |  |  | Advanced | Advanced | Advanced |  |
| English 4551 |  |  | Advanced | Advanced | Advanced |  |
| English 4552 |  |  | Advanced | Advanced | Advanced |  |
| English 4553 |  |  | Advanced | Advanced | Advanced |  |
| English 4554 |  |  | Advanced | Advanced | Advanced |  |
| English 4555 |  |  | Advanced | Advanced | Advanced |  |
| English 4559 |  |  | Advanced | Advanced | Advanced |  |
| English 4560 |  |  | Advanced | Advanced | Advanced |  |
| English 4561 |  |  | Advanced | Advanced | Advanced |  |
| English 4562 |  |  | Advanced | Advanced | Advanced |  |
| English 4563 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.04 |  |  | Advanced | Advanced | Advanced |  |
| English 4565 |  |  | Advanced | Advanced | Advanced |  |
| English 4566 |  |  | Advanced | Advanced | Advanced |  |
| English 4567S |  |  | Advanced | Advanced | Advanced |  |
| English 4568 |  |  | Advanced | Advanced | Advanced |  |
| English 4569 |  |  | Advanced | Advanced | Advanced |  |
| English 4570 |  |  | Advanced | Advanced | Advanced |  |
| English 4571 |  |  | Advanced | Advanced | Advanced |  |
| English 4572 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4574 |  |  | Advanced | Advanced | Advanced |  |
| English 4575 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4578 |  |  | Advanced | Advanced | Advanced |  |
| English 4578H |  |  | Advanced | Advanced | Advanced |  |
| English 4579 |  |  | Advanced | Advanced | Advanced |  |
| English 4580 |  |  | Advanced | Advanced | Advanced |  |
| English 4581 |  |  | Advanced | Advanced | Advanced |  |
| English 4582 |  |  | Advanced | Advanced | Advanced |  |
| English 4583 |  |  | Advanced | Advanced | Advanced |  |
| English 4584 |  |  | Advanced | Advanced | Advanced |  |
| English 4585 |  |  | Advanced | Advanced | Advanced |  |
| English 4586 |  |  | Advanced | Advanced | Advanced |  |
| English 4587 |  |  | Advanced | Advanced | Advanced |  |
| English 4588 |  |  | Advanced | Advanced | Advanced |  |
| English 4589 |  |  | Advanced | Advanced | Advanced |  |
| English 4590.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.03H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.04H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.05H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.06H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.07H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.08H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.09H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4592 |  |  | Advanced | Advanced | Advanced |  |
| English 4595 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.02 |  |  | Advanced | Advanced | Advanced |  |
| English 5664 |  |  | Advanced | Advanced | Advanced |  |
| English 5710 |  |  | Advanced | Advanced | Advanced |  |
| English 5721 |  |  | Advanced | Advanced | Advanced |  |
| English 5722 |  |  | Advanced | Advanced | Advanced |  |
| English 5723 |  |  | Advanced | Advanced | Advanced |  |

**Curriculum Map: Integrated Major in Math and English – Financial/Actuarial Concentration**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Prerequisites** | **Goal (1)** |  **Goal (2)** |  **Goal (3)** |  **Goal (4)** | **Goal (5)** | **Goal (6)** |
|  |  |  |  |  |  |
| Econ 2001 | Beginning | Beginning |  |  |  |  |
| Econ 2002 | Beginning | Beginning |  |  |  |  |
| English 2367 |  |  |  |  | Intermediate |  |
| Math 1151 | Beginning | Beginning |  |  |  |  |
| Math 1152 | Beginning | Beginning |  |  |  |  |
| Math 1295 | Intermediate | Intermediate |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Core Courses in Concentration** |  |  |  |  |  |  |
| CSE 2111 | Beginning |  |  |  |  |  |
| Math 2153 | Intermediate | Intermediate |  |  |  |  |
| Math 2568 | Intermediate | Intermediate |  |  |  |  |
| Math 3618 | Advanced | Advanced |  |  |  |  |
| Math 4530 or Stat 4201 | Advanced | Advanced |  |  |  |  |
| Math 5632 | Advanced | Advanced |  |  |  |  |
| Stat 4202  | Advanced | Advanced |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Math/English Capstone Course** |  |  |  |  |  |  |
| Math/English 4420 |  | Advanced |  |  |  | Advanced |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Diversity in English Studies Courses (Choose one)** |  |  |  |  |  |  |
| English 4577.01 |  |  |  | Advanced |  |  |
| English 4580 |  |  |  | Advanced |  |  |
| English 4581 |  |  |  | Advanced |  |  |
| English 4582 |  |  |  | Advanced |  |  |
| English 4586 |  |  |  | Advanced |  |  |
| English 4587 |  |  |  | Advanced |  |  |
| English 4588 |  |  |  | Advanced |  |  |
| English 4589 |  |  |  | Advanced |  |  |
| English 4592 |  |  |  | Advanced |  |  |
| English 4597.01 |  |  |  | Advanced |  |  |
| English 4601 |  |  |  | Advanced |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Methods Course (Choose one)** |  |  |  |  |  |  |
| English 2270 |  |  | Intermediate |  |  |  |
| English 3379 |  |  | Intermediate |  |  |  |
| English 3398 |  |  | Intermediate |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **English Electives (Choose one at the 3000-level or above and choose three at the 4000-level or above. If English 2269 is used as a GE course then choose one additional English course at the 2000-level or above)** |  |  |  |  |  |  |
| English 2201 |  |  | Beginning | Beginning | Beginning |  |
| English 2201H |  |  | Beginning | Beginning | Beginning |  |
| English 2202 |  |  | Beginning | Beginning | Beginning |  |
| English 2202H |  |  | Beginning | Beginning | Beginning |  |
| English 2220 |  |  | Beginning | Beginning | Beginning |  |
| English 2220H |  |  | Beginning | Beginning | Beginning |  |
| English 2260 |  |  | Beginning | Beginning | Beginning |  |
| English 2260H |  |  | Beginning | Beginning | Beginning |  |
| English 2261 |  |  | Beginning | Beginning | Beginning |  |
| English 2261H |  |  | Beginning | Beginning | Beginning |  |
| English 2262 |  |  | Beginning | Beginning | Beginning |  |
| English 2262H |  |  | Beginning | Beginning | Beginning |  |
| English 2263 |  |  | Beginning | Beginning | Beginning |  |
| English 2264 |  |  | Beginning | Beginning | Beginning |  |
| English 2265 |  |  | Beginning | Beginning | Beginning |  |
| English 2266 |  |  | Beginning | Beginning | Beginning |  |
| English 2267 |  |  | Beginning | Beginning | Beginning |  |
| English 2268 |  |  | Beginning | Beginning | Beginning |  |
| English 2269 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270H |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2275 |  |  | Beginning | Beginning | Beginning |  |
| English 2276 |  |  | Beginning | Beginning | Beginning |  |
| English 2277 |  |  | Beginning | Beginning | Beginning |  |
| English 2280 |  |  | Beginning | Beginning | Beginning |  |
| English 2280H |  |  | Beginning | Beginning | Beginning |  |
| English 2281 |  |  | Beginning | Beginning | Beginning |  |
| English 2282 |  |  | Beginning | Beginning | Beginning |  |
| English 2290 |  |  | Beginning | Beginning | Beginning |  |
| English 2291 |  |  | Beginning | Beginning | Beginning |  |
| English 2296H |  |  | Beginning | Beginning | Beginning |  |
| English 3271 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3304 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3305 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3331 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3361 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3364 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3372 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3378 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3398 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3405 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3465 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3466 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3467S |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3468 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3597.03 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3662 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 4400 |  |  | Advanced | Advanced | Advanced |  |
| English 4513 |  |  | Advanced | Advanced | Advanced |  |
| English 4514 |  |  | Advanced | Advanced | Advanced |  |
| English 4515 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4521 |  |  | Advanced | Advanced | Advanced |  |
| English 4522 |  |  | Advanced | Advanced | Advanced |  |
| English 4523 |  |  | Advanced | Advanced | Advanced |  |
| English 4531 |  |  | Advanced | Advanced | Advanced |  |
| English 4533 |  |  | Advanced | Advanced | Advanced |  |
| English 4535 |  |  | Advanced | Advanced | Advanced |  |
| English 4540 |  |  | Advanced | Advanced | Advanced |  |
| English 4542 |  |  | Advanced | Advanced | Advanced |  |
| English 4543 |  |  | Advanced | Advanced | Advanced |  |
| English 4547 |  |  | Advanced | Advanced | Advanced |  |
| English 4549 |  |  | Advanced | Advanced | Advanced |  |
| English 4550 |  |  | Advanced | Advanced | Advanced |  |
| English 4551 |  |  | Advanced | Advanced | Advanced |  |
| English 4552 |  |  | Advanced | Advanced | Advanced |  |
| English 4553 |  |  | Advanced | Advanced | Advanced |  |
| English 4554 |  |  | Advanced | Advanced | Advanced |  |
| English 4555 |  |  | Advanced | Advanced | Advanced |  |
| English 4559 |  |  | Advanced | Advanced | Advanced |  |
| English 4560 |  |  | Advanced | Advanced | Advanced |  |
| English 4561 |  |  | Advanced | Advanced | Advanced |  |
| English 4562 |  |  | Advanced | Advanced | Advanced |  |
| English 4563 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.04 |  |  | Advanced | Advanced | Advanced |  |
| English 4565 |  |  | Advanced | Advanced | Advanced |  |
| English 4566 |  |  | Advanced | Advanced | Advanced |  |
| English 4567S |  |  | Advanced | Advanced | Advanced |  |
| English 4568 |  |  | Advanced | Advanced | Advanced |  |
| English 4569 |  |  | Advanced | Advanced | Advanced |  |
| English 4570 |  |  | Advanced | Advanced | Advanced |  |
| English 4571 |  |  | Advanced | Advanced | Advanced |  |
| English 4572 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4574 |  |  | Advanced | Advanced | Advanced |  |
| English 4575 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4578 |  |  | Advanced | Advanced | Advanced |  |
| English 4578H |  |  | Advanced | Advanced | Advanced |  |
| English 4579 |  |  | Advanced | Advanced | Advanced |  |
| English 4580 |  |  | Advanced | Advanced | Advanced |  |
| English 4581 |  |  | Advanced | Advanced | Advanced |  |
| English 4582 |  |  | Advanced | Advanced | Advanced |  |
| English 4583 |  |  | Advanced | Advanced | Advanced |  |
| English 4584 |  |  | Advanced | Advanced | Advanced |  |
| English 4585 |  |  | Advanced | Advanced | Advanced |  |
| English 4586 |  |  | Advanced | Advanced | Advanced |  |
| English 4587 |  |  | Advanced | Advanced | Advanced |  |
| English 4588 |  |  | Advanced | Advanced | Advanced |  |
| English 4589 |  |  | Advanced | Advanced | Advanced |  |
| English 4590.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.03H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.04H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.05H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.06H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.07H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.08H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.09H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4592 |  |  | Advanced | Advanced | Advanced |  |
| English 4595 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.02 |  |  | Advanced | Advanced | Advanced |  |
| English 5664 |  |  | Advanced | Advanced | Advanced |  |
| English 5710 |  |  | Advanced | Advanced | Advanced |  |
| English 5721 |  |  | Advanced | Advanced | Advanced |  |
| English 5722 |  |  | Advanced | Advanced | Advanced |  |
| English 5723 |  |  | Advanced | Advanced | Advanced |  |

**Curriculum Map: Integrated Major in Math and English – Theoretical Math Concentration**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Prerequisites** | **Goal (1)** |  **Goal (2)** |  **Goal (3)** |  **Goal (4)** | **Goal (5)** | **Goal (6)** |
|  |  |  |  |  |  |
| Econ 2001 | Beginning | Beginning |  |  |  |  |
| Econ 2002 | Beginning | Beginning |  |  |  |  |
| English 2367 |  |  |  |  | Intermediate |  |
| Math 1151 | Beginning | Beginning |  |  |  |  |
| Math 1152 | Beginning | Beginning |  |  |  |  |
| Math 1295 | Intermediate | Intermediate |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Core Courses in Concentration** |  |  |  |  |  |  |
| CSE 2111 | Beginning |  |  |  |  |  |
| Math 2153 | Intermediate | Intermediate |  |  |  |  |
| Math 2255  | Intermediate | Intermediate |  |  |  |  |
| Math 2568  | Intermediate | Intermediate |  |  |  |  |
| Math 3345 | Advanced | Advanced |  |  |  |  |
| Math 4530 or Stat 4201 | Advanced | Advanced |  |  |  |  |
| Math 4547 | Advanced | Advanced |  |  |  |  |
| Math 4580 | Advanced | Advanced |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Math/English Capstone Course** |  |  |  |  |  |  |
| Math/English 4420 |  | Advanced |  |  |  | Advanced |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Diversity in English Studies Courses (Choose one)** |  |  |  |  |  |  |
| English 4577.01 |  |  |  | Advanced |  |  |
| English 4580 |  |  |  | Advanced |  |  |
| English 4581 |  |  |  | Advanced |  |  |
| English 4582 |  |  |  | Advanced |  |  |
| English 4586 |  |  |  | Advanced |  |  |
| English 4587 |  |  |  | Advanced |  |  |
| English 4588 |  |  |  | Advanced |  |  |
| English 4589 |  |  |  | Advanced |  |  |
| English 4592 |  |  |  | Advanced |  |  |
| English 4597.01 |  |  |  | Advanced |  |  |
| English 4601 |  |  |  | Advanced |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Methods Course (Choose one)** |  |  |  |  |  |  |
| English 2270 |  |  | Intermediate |  |  |  |
| English 3379 |  |  | Intermediate |  |  |  |
| English 3398 |  |  | Intermediate |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **English Electives (Choose one at the 3000-level or above and choose three at the 4000-level or above. If English 2269 is used as a GE course then choose one additional English course at the 2000-level or above)** |  |  |  |  |  |  |
| English 2201 |  |  | Beginning | Beginning | Beginning |  |
| English 2201H |  |  | Beginning | Beginning | Beginning |  |
| English 2202 |  |  | Beginning | Beginning | Beginning |  |
| English 2202H |  |  | Beginning | Beginning | Beginning |  |
| English 2220 |  |  | Beginning | Beginning | Beginning |  |
| English 2220H |  |  | Beginning | Beginning | Beginning |  |
| English 2260 |  |  | Beginning | Beginning | Beginning |  |
| English 2260H |  |  | Beginning | Beginning | Beginning |  |
| English 2261 |  |  | Beginning | Beginning | Beginning |  |
| English 2261H |  |  | Beginning | Beginning | Beginning |  |
| English 2262 |  |  | Beginning | Beginning | Beginning |  |
| English 2262H |  |  | Beginning | Beginning | Beginning |  |
| English 2263 |  |  | Beginning | Beginning | Beginning |  |
| English 2264 |  |  | Beginning | Beginning | Beginning |  |
| English 2265 |  |  | Beginning | Beginning | Beginning |  |
| English 2266 |  |  | Beginning | Beginning | Beginning |  |
| English 2267 |  |  | Beginning | Beginning | Beginning |  |
| English 2268 |  |  | Beginning | Beginning | Beginning |  |
| English 2269 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2270H |  |  | Intermediate | Intermediate | Intermediate |  |
| English 2275 |  |  | Beginning | Beginning | Beginning |  |
| English 2276 |  |  | Beginning | Beginning | Beginning |  |
| English 2277 |  |  | Beginning | Beginning | Beginning |  |
| English 2280 |  |  | Beginning | Beginning | Beginning |  |
| English 2280H |  |  | Beginning | Beginning | Beginning |  |
| English 2281 |  |  | Beginning | Beginning | Beginning |  |
| English 2282 |  |  | Beginning | Beginning | Beginning |  |
| English 2290 |  |  | Beginning | Beginning | Beginning |  |
| English 2291 |  |  | Beginning | Beginning | Beginning |  |
| English 2296H |  |  | Beginning | Beginning | Beginning |  |
| English 3271 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3304 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3305 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3331 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3361 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3364 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3372 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3378 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3398 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3405 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3465 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3466 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3467S |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3468 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3597.03 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 3662 |  |  | Intermediate | Intermediate | Intermediate |  |
| English 4400 |  |  | Advanced | Advanced | Advanced |  |
| English 4513 |  |  | Advanced | Advanced | Advanced |  |
| English 4514 |  |  | Advanced | Advanced | Advanced |  |
| English 4515 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4520.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4521 |  |  | Advanced | Advanced | Advanced |  |
| English 4522 |  |  | Advanced | Advanced | Advanced |  |
| English 4523 |  |  | Advanced | Advanced | Advanced |  |
| English 4531 |  |  | Advanced | Advanced | Advanced |  |
| English 4533 |  |  | Advanced | Advanced | Advanced |  |
| English 4535 |  |  | Advanced | Advanced | Advanced |  |
| English 4540 |  |  | Advanced | Advanced | Advanced |  |
| English 4542 |  |  | Advanced | Advanced | Advanced |  |
| English 4543 |  |  | Advanced | Advanced | Advanced |  |
| English 4547 |  |  | Advanced | Advanced | Advanced |  |
| English 4549 |  |  | Advanced | Advanced | Advanced |  |
| English 4550 |  |  | Advanced | Advanced | Advanced |  |
| English 4551 |  |  | Advanced | Advanced | Advanced |  |
| English 4552 |  |  | Advanced | Advanced | Advanced |  |
| English 4553 |  |  | Advanced | Advanced | Advanced |  |
| English 4554 |  |  | Advanced | Advanced | Advanced |  |
| English 4555 |  |  | Advanced | Advanced | Advanced |  |
| English 4559 |  |  | Advanced | Advanced | Advanced |  |
| English 4560 |  |  | Advanced | Advanced | Advanced |  |
| English 4561 |  |  | Advanced | Advanced | Advanced |  |
| English 4562 |  |  | Advanced | Advanced | Advanced |  |
| English 4563 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4564.04 |  |  | Advanced | Advanced | Advanced |  |
| English 4565 |  |  | Advanced | Advanced | Advanced |  |
| English 4566 |  |  | Advanced | Advanced | Advanced |  |
| English 4567S |  |  | Advanced | Advanced | Advanced |  |
| English 4568 |  |  | Advanced | Advanced | Advanced |  |
| English 4569 |  |  | Advanced | Advanced | Advanced |  |
| English 4570 |  |  | Advanced | Advanced | Advanced |  |
| English 4571 |  |  | Advanced | Advanced | Advanced |  |
| English 4572 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4573.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4574 |  |  | Advanced | Advanced | Advanced |  |
| English 4575 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4576.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.02 |  |  | Advanced | Advanced | Advanced |  |
| English 4577.03 |  |  | Advanced | Advanced | Advanced |  |
| English 4578 |  |  | Advanced | Advanced | Advanced |  |
| English 4578H |  |  | Advanced | Advanced | Advanced |  |
| English 4579 |  |  | Advanced | Advanced | Advanced |  |
| English 4580 |  |  | Advanced | Advanced | Advanced |  |
| English 4581 |  |  | Advanced | Advanced | Advanced |  |
| English 4582 |  |  | Advanced | Advanced | Advanced |  |
| English 4583 |  |  | Advanced | Advanced | Advanced |  |
| English 4584 |  |  | Advanced | Advanced | Advanced |  |
| English 4585 |  |  | Advanced | Advanced | Advanced |  |
| English 4586 |  |  | Advanced | Advanced | Advanced |  |
| English 4587 |  |  | Advanced | Advanced | Advanced |  |
| English 4588 |  |  | Advanced | Advanced | Advanced |  |
| English 4589 |  |  | Advanced | Advanced | Advanced |  |
| English 4590.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.03H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.04H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.05H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.06H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.07H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.08H |  |  | Advanced | Advanced | Advanced |  |
| English 4590.09H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.01H |  |  | Advanced | Advanced | Advanced |  |
| English 4591.02H |  |  | Advanced | Advanced | Advanced |  |
| English 4592 |  |  | Advanced | Advanced | Advanced |  |
| English 4595 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.01 |  |  | Advanced | Advanced | Advanced |  |
| English 4597.02 |  |  | Advanced | Advanced | Advanced |  |
| English 5664 |  |  | Advanced | Advanced | Advanced |  |
| English 5710 |  |  | Advanced | Advanced | Advanced |  |
| English 5721 |  |  | Advanced | Advanced | Advanced |  |
| English 5722 |  |  | Advanced | Advanced | Advanced |  |
| English 5723 |  |  | Advanced | Advanced | Advanced |  |