The 15-credit hour Brewing Science Minor will provide undergraduates an understanding of the biological and chemical principles of brewing as it follows the process from “malting grains to a pint” and how to maintain consistent quality in the brews. The minor is targeted for those students interested in working in the brewing industry or the homebrewer that wants to improve their skills.

All students must take the three (3) required core courses and then select courses from the list of elective courses to meet the fifteen (15) credit hour requirement.

**Prerequisites:** BIOLOGY 1101 or 1113 and CHEM 1110 or 1210

**Required core course (8 credits):**
- FDSCTE 2410: Brewing Science (2)
- MICROBIOL 2100: Wild Yeast: Isolation to Fermentation (3)
- FDSCTE 5750: Brewing Capstone (3)

**Elective Courses (7 credits):**
Students will choose from the following courses:
- AEDECON 3105: Principles of Agribusiness and Food Supply Chains (3)
- AEDECON 4100: Self-employment and Entrepreneurship in the Food, Agriculture, and Resource Sectors (3)
- BUSMHR 3510: New Venture Creation (3)
- BUSML 3250: Principles of Marketing (3)
- ENR 3280: Water Quality Management (3)
- FABENG 3510: Introduction to Biological Engineering (4)
- FDSCTE 4410: Hazard Analysis and Critical Control Points (HACCP) (2)
- FDSCTE 4597.01: Alcohol and Society (3)
- FDSCTE 5320: Food Laws and Regulations (2)
- FDSCTE 5330: Food Plant Management (2)
- FDSCTE 5430: Food Fermentation (3)
- FDSCTE 5500: Measurement of Food Perception and Liking (3)

**Brewing Science Minor Program Guidelines**

**Credit hours required:** A minimum of 15 credit hrs. 1000-level courses shall not be counted toward the 15 credit hour minimum. At least 6 credits must be at the 3000 level or above.

**Transfer and EM credit hours allowed:** A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

**Overlap with the GE:** A student is permitted to overlap up to 6 credit hours between the GE and the minor.

**Overlap with the major and additional minor(s):**
- The minor must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e. if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).

**Grades required:**
- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count in the minor.
- No more than 3 credit hours of coursework graded Satisfactory/Unsatisfactory may count toward the minor.

**X193 credits:** No more than 3 credit hours.

**Minor approval:** The minor program must be approved by an advisor in the College of Food, Agricultural, and Environmental Sciences (Room 100 Ag. Admin Building, 2120 Fyffe Rd.)

**Filing the minor program form:** The minor program form must be filed at least by the time the graduation applications is submitted to a college advisor.

**Changing the minor:** Once the minor program is filed in the college office, any changes must be approved by the Brewing Science Minor advisor.