APPROVED
COMMISSION ON UNDERGRADUATE
STUDIES AND POLICIES

Virginia Polytechnic Institute and State University
College of Agriculture & Life Sciences
Department of Agricultural, Leadership, & Community Education

Bachelor of Science
Agricultural Sciences (AGSC) Major
Teaching and Learning (TL) Option

For students graduating in calendar year 2022
and for student date of entry under UG Catalog 2020-2021

Part I. University Pathways General Education Requirements - 44 credit hours

Concept 1: Discourse – 9 credit hours required
- 1F – ENGL 1105 First-Year Writing 3 _____
- 1F – ENGL 1106 First-Year Writing 3 _____
- 1A – +**ALCE 2414 Identity and Inclusion in Agriculture 3 _____

Concept 2: Critical Thinking in the Humanities – 6 credit hours required
- ____ ____ _____ 3 _____
- ____ ____ _____ 3 _____

Concept 3: Reasoning in the Social Sciences – 6 credit hours required
- AAEC 1005 Economics of Food & Fiber Systems 3 _____
- AAEC 1006 Economics of Food & Fiber Systems 3 _____

Concept 4: Reasoning in the Natural Sciences – 8 credit hours required
- BIOL 1105 Principles of Biology, BIOL 1115 Principles of Biology Laboratory 3 _____, 1 _____
- BIOL 1106 Principles of Biology, BIOL 1116 Principles of Biology Laboratory 3 _____, 1 _____

OR

- CHEM 1015 Chemistry in Context, CHEM 1025 Chemistry in Context Lab
- CHEM 1016 Chemistry in Context, CHEM 1026 Chemistry in Context Lab

OR

- GEOS 1004 Introduction to Earth Science, GEOS 1104 Introduction to Earth Science Lab
- GEOS 1024 Earth Resources, Soc, & Env, GEOS 1124 Earth Res, Soc, & Env Lab

Concept 5: Quantitative and computational thinking – 9 credit hours required
- 5F – MATH 1014 Precalculus with Transcendental Functions 3 _____
- 5F – *STAT 2004 Introductory Statistics 3 _____
- 5A – FREC 3004 Environmental Informatics 3 _____

Concept 6: Critique and Practice in Design and the Arts - 6 credit hours required
- 6D – ____ _____ 3 _____
- 6A – ____ ____ _____ 3 _____

Concept 7: Critical Analysis of Identity and Equity in the United States
- +**ALCE 2414 Identity and Inclusion in Agriculture 3 _____

Part II. Degree Core Requirements – 19 credit hours

- ALS 1234 CALS First Year Seminar 1 _____
- +ALCE 3014 Leadership Effectiveness for Professionals in Agricultural Organizations 3 _____
- +ALCE 3004 Educational Programs in Agriculture & Life Sciences 3 _____
- +ALCE 3624 Communicating Agriculture in Writing 3 _____
- +ALCE 3634 Communicating Agriculture in Speaking 3 _____
- +**ALCE 4034 Methods of Planning Educational Programs for Agriculture 3 _____
- +ALCE 4044 Agricultural Sciences Seminar 3 _____

Part III. Option in Teaching and Learning Requirements – 36 credit hours

A. Disciplinary Core Courses – 27 credit hours

- +ALCE 2964 Field Study 3 _____
- +ALCE 4024 Managing Agricultural Supervised Occupational Experience Programs 2 _____
- +**ALCE 4244 Teaching and Training Methods in Agricultural and Life Sciences 3 _____

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+ALCE 4754 Internship in Education	3 _____
+ALCE 4064 Ag Mechanical Lab Management	3 _____
+*ALCE 4234 Curriculum for Career and Occupational Education	3 _____
+ALCE 4884 Youth Program Management	3 _____
BSE 2094 Introduction to Metal Fabrication	1 _____
*BSE 2484 Engine and Power Train Technology	3 _____
EDCI 3144 Educating Exceptional Learners across the Lifespan	3 _____

B. Restricted Electives – 9 credit hours[1]

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Part IV. Area of Specialization – 18 credit hours[2]

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Part V. Free Electives – 3 credit hours (or balance to 120 credit hours)[3]

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GRADUATION REQUIREMENTS:

*Some courses listed on this checksheet may have prerequisites; please consult the University Course Catalog or check with your advisor.

[1]AGSC advisor must approve content area elective courses and the student must file *a content area electives form* with the Department of Agricultural, Leadership, and Community Education undergraduate office. Students must choose courses from the following areas: Agricultural and Life Science (ALS), Agricultural and Applied Economics (AAEC), Animal and Poultry Science (APSC), Biochemistry (BCHM), Biological Systems Engineering (BSE), Crops, Soils, and Environmental Science (CSES), Dairy Science (DASC), Environmental Science (ENSC), Entomology (ENT), Fisheries and Wildlife (FIW), Food Science and Technology (FST), Forestry (FREC), Human Nutrition Food and Exercise (HFNE), Horticulture (HORT), Leadership and Social Change (LDRS), Plant Pathology and Weed Science (PPWS). Students seeking teacher licensure need to have three credit-hours in the following content areas: 1) Agricultural Economics and Management (AAEC), 2) Animal Science (APSC, DASC), 3) Agricultural Mechanics (ALCE, BSE), 4) Forestry/Wildlife Management (FIW/FREC), 5) Horticulture (HORT), and 6) Plant Sciences (CSES).

[2]AGSC advisor must approve area of specialization courses and the student must file an *area of specialization form* with the Department of Agricultural, Leadership, and Community Education undergraduate office. Students may either choose an approved minor to fulfill this requirement, or complete at least 15 hours at the 3000 level or higher. Approved minors include: Agricultural and Applied Economics (AAEC: ABMN, AEMN, ENMN, or ITMN), Animal and Poultry Science (APSC), Civic Agriculture and Food Systems (CAFS), Crop and Soil Environmental Sciences (CSES), Dairy Science (DASC), Environmental Science (ENSC), Entomology (ENT), Equine Production (APEQ), Food Science and Technology (FST), Forestry (FORS), Horticulture (HORT), International Agriculture (IAG), Leadership and Social Change (ILRM), Turfgrass Management (TRFM), Urban Forestry (URBF), Viticulture (VITI), Watershed Management (WSM), Wetland Science (WESC),or Wood Science & Forest Products (WOOD). If a minor is not selected, students must choose courses from the following areas for their area of specialization: Agricultural and Life Science (ALS), Agricultural and Applied Economics (AAEC), Animal and Poultry Science (APSC), Biochemistry (BCHM), Biological Systems Engineering (BSE), Crops, Soils, and Environmental Science (CSES), Dairy Science (DASC), Environmental Science (ENSC), Entomology (ENT), Fisheries and Wildlife (FIW), Food Science and Technology (FST), Forestry (FOR), Human Nutrition Food and Exercise (HFNE), Horticulture (HORT), Leadership and Social Change (LDRS), Plant Pathology and Weed Science (PPWS).

[3]Students seeking teacher licensure must dual enroll in _____ program in the School of Education at Virginia Tech.

+ IN-MAJOR GPA: Indicates in-major courses for purposes of calculating in-major GPA.

PREREQUISITES: Some courses required for this major have prerequisites. Please refer to the Undergraduate Course Catalog or consult your advisor for information about prerequisites.

FOREIGN LANGUAGE: Requires 2 years of high school study in the same language (equivalent to 1105).

Has foreign language requirement been completed? (Yes/No) _____

Courses taken at Virginia Tech to complete the foreign language requirement will not count toward graduation.

SATISFACTORY PROGRESS: By the end of the academic year in which the student has attempted 72 hours (including transfer, advanced placement, advanced standing and credit by examination), "satisfactory progress" will consist of 1) GPA of at least 2.0; 2) at least 24 credits that apply to the University Core, and 3) 9 credit credits of departmental requirements.

MINIMUM OVERALL GPA REQUIRED FOR GRADUATION: 2.00

MINIMUM IN-MAJOR GPA REQUIRED FOR GRADUATION: 2.00