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

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 3 _____
CHEM 1016 Chemistry in Context, CHEM 1026 Chemistry in Context Lab 3 _____
OR
GEOS 1004 Introduction to Earth Science, GEOS 1104 Introduction to Earth Science Lab 3 _____
GEOS 1024 Earth Resources, Soc, & Env, GEOS 1124 Earth Res, Soc, & Env Lab 3 _____

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 _____
AGRICULTURAL SCIENCES – TEACHING & LEARNING OPTION GRADUATION CHECKSHEET (continued)

<table>
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<tr>
<th>Part V. Free Electives – 3 credit hours</th>
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<th>Courses taken at Virginia Tech to complete the foreign language requirement will not count toward graduation.</th>
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<td><strong>Has foreign language requirement been completed?</strong></td>
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<td>(Yes/No)</td>
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| **PREREQUISITES:** Some courses required for this major have prerequisites. Please refer to the Undergraduate Course Catalog or consult your advisor for information about prerequisites. |

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<th><strong>FOREIGN LANGUAGE:</strong> Requires 2 years of high school study in the same language (equivalent to 1105).</th>
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| **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. |

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<tr>
<th><strong>MINIMUM OVERALL GPA REQUIRED FOR GRADUATION:</strong> 2.00</th>
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<td><strong>MINIMUM IN-MAJOR GPA REQUIRED FOR GRADUATION:</strong> 2.00</td>
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