

Academic Resource Alignment (ARA)

Committee Final Report
December 2025

Executive Summary

The Academic Resource Alignment (ARA) Committee was convened to evaluate the alignment of Virginia Tech's academic programs and courses with student interest, industry needs, and institutional priorities. This initiative, launched following the 2024 President's Council retreat, represents the university's first comprehensive, university-wide review of academic resources conducted in at least 15 years. Virginia Tech has achieved significant growth in its education, research and outreach missions in recent years and is exceptionally well positioned to build on this success to enhance its reputational excellence in a number of areas, including in its [Research Frontiers](#). These frontiers, as well as many other areas of research and scholarly distinction, such as the [Destination Areas](#), greatly facilitate the convening of faculty and staff talent necessary to ensure that graduates are well prepared to achieve productive careers. The ARA project was undertaken proactively to further strengthen Virginia Tech's strategic position and to optimize resource utilization in support of its [Global Distinction](#) goal rather than in response to circumstances of immediate urgency such as financial or enrollment challenges.

ARA Committee's charge included:

- Developing criteria for quantitative and qualitative assessment of programs.
- Reviewing all courses and programs to identify those requiring deeper analysis.
- Making recommendations for discontinuation, realignment, or enhancement of programs.
- Estimating financial impacts and proposing a routinized process for ongoing review.

Summary of Types of Recommendations

Departmental Comprehensive Planning: Units with low quantitative rankings but qualitative strengths should build upon the recommendations provided in this report to draft comprehensive plans by August 2026 that address enrollment trends, faculty ratios, scholarly productivity, and strategic positioning.

Organizational Realignment or Restructuring of Departments and Programs: Academic units that appear not to be organized in a manner that optimizes the learning goals of students or strategic emphases of Virginia Tech are identified for further review and possible realignment.

At-Risk Degrees: Degree programs unlikely to meet SCHEV productivity requirements are recommended for discontinuation, including select master's programs in AAD, COE, and CLAHS.

Administrative Recommendations: Several opportunities for improving administrative and policy efficiency were identified and are recommended for implementation, including continued review of the Pathways curriculum, enforcing minimum course enrollment thresholds, evaluating cross-listing practices, addressing inefficiencies in under-enrolled minors, and evaluating academic rigor of a number of large online courses.

Future Academic Resource Alignment Reviews: An ongoing cycle of periodic review (high-level data review every 2 years and comprehensive review every 4 years) is recommended, with increasing emphasis placed on post-graduation success and utilization of instructional resources and capacity.

Context and Charge

During the 2024 President's Council retreat, several project areas were identified as opportunities for streamlining or gaining efficiencies in Virginia Tech's operations and use of resources, including low-enrollment courses and programs. Aside from being good potential subjects for more strategic allocation of resources, it was considered important for the university periodically to conduct an in-depth review of academic programs and associated resources to ensure that majors and curricula are well suited to meet the evolving needs of students and communities served by Virginia Tech. Comprehensive, university-wide assessment had not been undertaken for some time and was necessary to address evolving educational needs of students and expectations of the State Council for Higher Education in Virginia (SCHEV). Comprehensive review also provides opportunity to update the identification and use of meaningful outcome measures that are directly correlated with student interest and career success. In summary, university leadership recognized that this project represented a key strategic opportunity to better understand the trends in student interest and employment opportunity, the university's distinctive areas of strength, and opportunities for ongoing alignment with its recently updated [Beyond Boundaries](#) vision and [strategic planning](#) efforts.

To address this opportunity, a committee with representation from across the academic colleges and levels of faculty and administrative leadership was appointed to review available data in an effort to understand student interest and resource utilization and to develop preliminary recommendations for sunseting, realigning, or strengthening programs and courses to assure alignment with Virginia Tech's mission as a land-grant university, as well as its prioritized areas of distinction. The review was inclusive of both undergraduate and graduate programs, thereby ensuring coherent review of academic resource alignment across the continuum of educational programs.

To support the work of the committee, an administrative support team was also formed to provide expertise and support in the areas of academic data and resources, registrar and degree program information, undergraduate academic affairs, graduate student affairs, faculty affairs, and communications.

The ARA Committee was charged with the following:

1. Identifying meaningful criteria to enable quantitative and qualitative assessment of courses and academic programs, with consideration given to the following criteria and any others of potential value:
 - Enrollment per FTE
 - Graduation success (4 year/6 year)
 - Annual degrees awarded
 - Post-graduation placement
 - Evidence of engagement in best practices in teaching and learning
 - Strategic importance – university and stakeholder input
2. Conducting a preliminary review of all courses and programs to identify those requiring in-depth analysis.
3. Making recommendations based on the evaluative criteria, regarding courses and programs that should be discontinued, realigned, or strengthened.
4. Working with Academic Resource Management to estimate financial impact of recommendations, to include personnel expenses and impact on PIBB allocations.

5. Making recommendations for a routinized process of review and recommendation for ongoing assessment of academic resource alignment.

Several points are worthy of note regarding this work and its context at Virginia Tech. While this review was identified as an area of opportunity for in-depth analysis and assessment related to stakeholder demand and strategic alignment, it is being driven from a position of strength and opportunity rather than due to concerns relating to underperformance, as is the case at many other universities facing the current economic and social challenges. The university is seizing on an opportunity to be proactive in its utilization of data from multiple internal and external sources to ensure that its educational programs are well positioned to achieve the [Virginia Tech Advantage](#) and [Virginia Tech Global Distinction](#) goals. Additionally, while the university has not previously taken on this level of university-wide comprehensive assessment and analysis in its recent history, it should be noted that individual academic programs are subject to regular review, supported by quantitative performance data available in the University Data Commons, and that ongoing revisions are made to address concerns and opportunities as they arise.

Although estimating financial impact of recommendations was included in the committee charge, this goal was soon realized to be very complicated. Efforts are underway to capture relative expenses and revenues related to delivery of instruction (financial ROI referenced in the report was estimated by comparing the cost of instructional delivery with the tuition and extramural grant and contract revenue) but it is important to understand that the financial consequences of the committee's recommendations are unlikely to be realized in the immediate future due to a number of factors, including: (a) the requirement that teach-out plans be implemented if a degree program is discontinued; (b) contractual commitments related to the employment terms of faculty; and (c) the need to shift resources from declining areas of student interest to those that are growing and need additional support. Consequently, this report does not include specific estimates of funding that will be made available for reinvestment as recommendations are implemented although it is expected that the opportunity for significant reinvestment will be realized in future years.

Overview of Analysis

With the primary goal of conducting an in-depth assessment of program productivity and alignment of university resources to programmatic needs, giving particular attention to student interest and strategic relevance, a university-wide review of programs was conducted. A thorough analysis was performed of all departments and their performance with regard to enrollment, degrees conferred, utilization of instructional resources, and the cost of delivering instruction (see Appendix A).

Several departments were highlighted as having strengths across most, if not all, of these measures, demonstrating strong enrollments and growth in enrollments over time, a strong contribution to university-wide teaching in terms of student credit hours (SCH) offered, a high benchmark for SCH per instructional faculty FTE (full time equivalent), strong degree completion rates, and positive net revenues for instructional delivery. Among these are: Computer Science, Aerospace and Ocean Engineering, Biomedical Engineering and Mechanics, Electrical and Computer Engineering, Mechanical Engineering, Civil and Environmental Engineering, and Industrial and Systems Engineering from the College of Engineering; Business Information Technology, Management, Finance, Insurance, & Business Law, and Accounting & Information Systems from the Pamplin College of Business; the School of Architecture from the College of Architecture, Arts, and Design; Biological Sciences and Chemistry from the College of Science; Sociology and the School of Communication from the College of Liberal Arts and Human Sciences; Population Health Sciences from the College of Veterinary Medicine; and the School of Plant & Environmental Sciences from the College of Agriculture and Life Sciences.

This analysis also allowed the committee to identify academic departments that ranked in the bottom quartile based on these metrics for further study in order to understand potential opportunities for future adjustment. Each of these departments underwent further in-depth quantitative and qualitative analyses, aiding the committee in building a deeper understanding of context and helping to identify opportunities for strategic decision-making. Significant effort went into crafting departmental responses to qualitative questions, and meetings were held with department heads and respective deans for further conversation and understanding of context. The committee reviewed the qualitative responses and notes from meetings as part of their overall analysis.

Data were also analyzed by the administrative support team to identify specific degree programs that are expected not to meet revised SCHEV program productivity requirements, which are scheduled for formal approval by SCHEV Council in 2026. As a result of this analysis, degree programs delivered by departments not identified for further analysis in the committee's initial process were also reviewed to identify any that are unlikely to meet SCHEV productivity requirements (see Appendix B).

While reviewing departments and degree programs, opportunities to enhance efficiency of instructional delivery were also identified at the course level for further consideration. These pertained mainly to minimum enrollment thresholds (see Appendix C), excessively enrolled courses, and the need to update the Pathways general education curriculum. Through the course of this analysis, the committee found that many areas of opportunity for streamlining and adjusting degree programs and resources in response to student needs had already been identified and are currently being addressed by departments and colleges.

As will be the case in any comprehensive periodic review that extends over a period of more than a year, there is a risk that quantitative information (enrollments, student credit hours, instructional faculty FTEs, etc.) becomes dated. In this instance, the committee acknowledges that much of the data used in its analysis did not include those from the 2025 calendar year. Nevertheless, even though in several instances recent improvements in outcomes have been achieved, consideration must still be given to the longer-term trends and the importance of further review and planning necessary to achieve a sustainable future.

Recommendations for Departmental Comprehensive Planning

Several departments were ranked in the bottom quartile of all departments based on weighted criteria (SCH per instructional FTE, degrees conferred, direct instruction costs and revenue). The committee recommends that these units conduct a comprehensive review and relevant benchmarking of their constituent academic programs, to include assessment of:

- existing strengths, opportunities, and differentiating factors;
- enrollment trends in courses, majors and degrees;
- ratio of instructional faculty FTE (all types) to student enrollment;
- research/creative scholarship and productivity;
- strategic positioning in regard to university priorities; and
- context in relation to national trends.

The committee further recommends that plans to address any deficient outcomes and position the units for a productive and sustainable future be submitted to the Provost's Office by August 15, 2026. Outcomes of these plans will be reviewed by the Provost's Office for further study, recommendations, or implementation.

In addition to the need for assessment recommended above, the committee offers the following comments and recommendations with the intention of guiding reviews to address issues specific to each of the departments. The comments do not reflect all of the helpful contextual information provided by the departments during the qualitative phase of the analysis, which will be helpful to departmental planning and for which the committee is grateful.

Agricultural Leadership and Community Education (ALCE)

General Comments: Challenges observed by the committee relate principally to enrollments and alignment of state requirements for teacher certification at the undergraduate and graduate levels. The committee noted that enrollments were affected by a transition in majors and that there is evidence of growth in undergraduate and graduate applications for admission and graduate enrollments. Financial ROI for the department is positive.

Recommendations:

- Deans of The College of Agriculture and Life Sciences (CALC) and the College of Liberal Arts and Human Sciences (CLAHS), in partnership with the ALCE department head and School of Education director should explore evolving state guidance on teacher certification in general, and specific to agricultural teacher certification in particular, and develop a strategy to resolve any issues.
- Opportunities for ALCE to partner with the College Access Collaborative, the Center for Rural Education and other partners across Virginia should be explored to better market student recruitment, particularly considering the potential value of departmental programs to students from underserved communities.

Agriculture Technology Associate's Degree program

General Comments: This program is valued by external stakeholders and serves as an important on-ramp to a 4-year degree for many rural students. It also represents a significant opportunity to provide greater access for rural students as part of the Virginia Tech Advantage goal. The main challenge associated with this degree relates to affordability, particularly in comparison with programs offered by community colleges and other institutions that discount the cost of associate degrees. Nevertheless, the scope and quality of education provided by Virginia Tech justifies thoughtful consideration of how the advantages of enrolling in a comprehensive university can be achieved at a lower cost to students. In this regard, efforts are underway to consider whether the cost of attendance can be reduced by delivering instruction from Agricultural Research and Extension Centers that are located closer to students' homes.

Recommendations:

- Prioritize efforts to reduce the cost of attendance through fundraising in accordance with the Virginia Tech Advantage and by delivering instruction closer to university locations across the state.
- Ensure that other degree programs in the college are designed to accept students seamlessly from this program as part of a 2+2 transition from an associate's degree into 4-yr degree programs.
- Explore opportunities to collaborate with the Center for Rural Education and with partners in the community college system in order to foster growth in agricultural education across state.

Apparel, Housing, and Resource Management (AHRM)

General Comments: This department's programs were recently moved from CLAHS to the School of Design in The College of Architecture, Arts, and Design (AAD). Two majors and four minors in this department were identified as having significant declines in enrollment over the period reviewed. However, significant changes have already been implemented since this move, including discontinuation of majors and minors as well as merging of minors. These changes have facilitated focused efforts to grow remaining academic programs in alignment with companion programs in the School of Design and the School of Performing Arts. The financial ROI for the department was positive.

Recommendations:

- The committee is aware of and supports current efforts to evolve "Property Management" programs to achieve better alignment with other programs in AAD and to reflect this change in a possible title change to "Property Development and Management" in response to industry and stakeholder input.
- A strong justification is needed to explain the value of both a major and a minor in Consumer Studies, one that goes beyond noting that this is the only program of its type in the region.

Chemical Engineering (CE)

General Comments: Chemical Engineering experienced a significant decline in undergraduate enrollment since 2019, as well as a decline in degree conferrals over the same period. However, undergraduate enrollment grew by 23% in 2025 relative to the previous academic year, consistent with an increase in applications. Graduate enrollments have been stable, except for a decline in 2025 that may reflect decreased enrollment of graduate students across the university. The department is competitively ranked nationally, has a reputable doctoral program and its financial ROI is positive.

Recommendations:

- Based on analysis of instructional resources (FTE) committed relative to major course enrollments, a temporary instructional faculty hiring freeze (in conjunction with more detailed analysis of staffing and faculty composition) is recommended. The committee understands this has already begun with guidance from the college.
- The recent increase in applications justifies consideration of assigning a higher undergraduate enrollment target in the university's enrollment management plan.

Food Science and Technology (FST)

General Comments: The department experienced steady enrollment growth in undergraduate majors and stability in graduate student enrollments during the evaluation period. The primary reason for recommending further review relates to a substantive decrease in degrees conferred between AY19 and AY20, apparently due to intentional enrollment contraction following previous excessive growth. Generally, this department is well positioned in regard to application growth, rankings relative to other national and regional programs, employment rate of graduates, and a strong financial ROI.

Recommendations:

- Continue leveraging and building collaborative opportunities for student experiential learning with other departments, including Industrial and Systems Engineering, Biological Systems Engineering, and Sustainable Biomaterials.
- The strong application profile justifies consideration of assigning a higher undergraduate enrollment target in the university's enrollment management plan.

History

General Comments: Overall, the department experienced a decline in major enrollments since 2019 (37%), in line with national trends but has been relatively stable for the last three years. Additionally, enrollment in four of seven minors declined in the same period, including a 50% decrease in the War and Society minor. Graduate enrollment increased marginally but remains low at approximately 17 students in AY26. Faculty in the department have strong academic records according to benchmarked performance metrics, but the department appears to be overstaffed compared to peers. The mix of minors offered by the department complicates data analysis, as some serve the History discipline, and others serve the entire college. For the last three years the departmental financial ROI has been negative.

Recommendations:

- The committee recommends a temporary hiring freeze for instructional faculty and development of a multi-year plan to right-size faculty numbers and make any necessary adjustments in types of faculty appointments, including adjunct faculty.
- The department has a large number of specialized/focused minors to its one major. Student demand (including internal data and external student interest data) should be reviewed to determine viability of minors and consolidate or streamline options. The committee understands this work is already underway, and that the departmental data profile of History is further complicated by the fact that it administratively houses two minors that serve the entire college (Indigenous Studies and Women's, Gender, and Sexuality Studies).
- The committee recognizes that significant attention has already been committed to curriculum review to ensure that course offerings are more aligned with student interests and recommends that changes arising from these analyses be fully implemented after appropriate consultation with faculty and university leadership.

Hospitality and Tourism Management (HTM)

General Comments: HTM experienced a steady decline in undergraduate enrollment over the review period. While it is highly ranked nationally and internationally, contributes substantially to graduate education through the MSBA-HTM program, for which data was not captured in this analysis, and has a strong ROI, the decline in enrollment justifies further review to understand why the unit's reputation is not well reflected in growth in student interest.

Recommendations:

- Understanding that the Pamplin College of Business (PCOB) is currently undergoing a college-level analysis and restructuring of its undergraduate curriculum, the committee recommends that a strategy to address declining enrollment be incorporated into the new "Pamplin Plus" curriculum.

Mining and Minerals Engineering (MME)

General Comments: The department has experienced declining degree production, mostly at the undergraduate level, and low total SCHs offered university-wide. While it is necessary that a plan be developed to enhance student interest and recruitment into the program, the committee recognizes that the department is very highly regarded nationally, has a positive ROI, is of strategic importance in Virginia and faculty productivity compares well with peer institutions.

Recommendations:

- Continue to market the reputation and value of department programs in an effort to recruit more student interest.

School of Performing Arts (SOPA)

General Comments: The School of Performing Arts was transferred from CLAHS to AAD in 2022 and continues to adapt to its new college home. Enrollments in undergraduate majors and minors in Music and Theatre Arts have declined since 2019, as have enrollments in graduate programs in the Theatre Arts – the latter related to faculty departures and subsequent impacts on student recruitment. Following the disproportionate impact of COVID on performing arts enrollments nationwide, undergraduate applications for Cinema and Music have started to increase and there is evidence that the same is true for Theatre Arts. The school is competitively ranked nationwide in drama/theatre arts and music. Pedagogical requirements related to the maximum number of students per faculty instructor and the manner in which instructional space is utilized for studio teaching present substantive financial challenges (the financial ROI is negative), although recent developments in securing extramural support have been helpful. The committee notes that SOPA plays an important role in supporting university level programs such as the Marching Virginians band. The school also contributes significantly to community education and outreach through programs such as the VT String Project.

Recommendations:

- A number of substantive efforts are already underway aimed at addressing needs and opportunities for student learning. The school should continue these efforts and incorporate them into further planning.
- The school should also engage in an effort to innovate performing arts pedagogy to strategically leverage limited resources, including utilization of instructional space.

Sustainable Biomaterials (SBIO)

General Comments: Sustainable Biomaterials experienced a modest decline in undergraduate and master's enrollments and degree conferrals since 2019 whereas doctoral student enrollment increased. However, the Packaging Systems and Design major experienced strong recent growth in response to industry needs. An increase in applications in this major is consistent with its high ranking relative to other national packing science programs. The department is comparably sized relative to benchmarked peers (46th percentile for # of faculty) but has lower levels of productivity for published scholarship and citations (19th percentile for both). A new undergraduate major, Sustainable Systems Science, has been approved and will start enrolling students in 2025-26. The financial ROI for the department is positive.

Recommendations:

- Based on enrollment trends, serious consideration should be given to repositioning and possibly renaming the department to emphasize packaging sciences and to reallocating existing resources in support of its recently revised curriculum and expanding enrollment.
- Based on analysis of instructional resources (FTE) committed relative to major course enrollments, a temporary instructional faculty hiring freeze (in conjunction with more detailed analysis of staffing and faculty composition) is recommended.
- Opportunities to leverage the College Access Collaborative in support of rural communities and production facilities and improve student recruitment and workforce development from and for these areas should be pursued.

The Graduate School

General Comments: Review of Graduate School programs was challenging as the Interdisciplinary Graduate Education Programs (IGEPs) engage departmental faculty from across the university, with the result that instructional expenses are accounted for elsewhere and faculty participation changes constantly. Future evaluations will need to be customized for graduate school programs and degrees, as should programs and degrees housed in deans' administrative units.

Recommendations:

- Develop procedures for comprehensive review of IGEPs as well as graduate programs that are housed administratively in the Graduate School but are funded and managed in other units, including research institutes.

Recommendations for Organizational Realignment or Restructuring of Departments and Programs

Among those departments initially considered to be in need of comprehensive planning, as described above, there were several that the committee identified that may also benefit from organizational realignment or restructuring. The committee, therefore, recommends that the following units conduct a comprehensive review and relevant benchmarking of their constituent academic programs, as described under *Recommendations for Comprehensive Departmental Planning* above, and also consider the recommendations below for organizational realignment. Plans to address both should be submitted to the Provost's Office by August 15, 2026.

Outcomes of these plans will be reviewed by the Provost's Office for further study, recommendations, or implementation. Please note that the respective comments do not reflect all of the helpful contextual information provided by the departments during the qualitative phase of the analysis, and for which the committee is grateful.

Biological Systems Engineering (BSE)

General Comments: The BSE undergraduate program experienced a 39% decline in enrollment since 2019 while PhD program enrollment doubled over the same time period. The decline in undergraduate enrollment may be related to insufficient visibility of the program when first-year engineering students select their engineering majors. The department is ranked highly in the US. Recognizing that it is common for agricultural engineering programs to be housed in colleges of agriculture, it was not clear to the committee whether there is sufficient justification for continuing this organizational alignment at Virginia Tech, especially considering the potential for BSE faculty to benefit from closer administrative proximity to colleagues in the College of Engineering (COE). The committee notes that while the BSE faculty have academic homes in CALS, students are enrolled in COE.

Recommendations:

- Serious consideration should be given to transferring the department and its programs from CALS to COE. The potential benefits include the opportunity for enhanced research, graduate education and instructional collaboration with faculty colleagues in COE, and a more seamless transition of engineering students from Engineering Education into BSE majors.
- In considering such a change, the committee recommends that a detailed review of faculty productivity be conducted, including outcomes represented in the [AAU membership indicators](#), and that this be compared with that of faculty in departments housed in COE.

- The committee acknowledges that the resource implications of such a change are unclear at this time and are complicated by the mix of Agency 229 and Agency 208 funding and related FTE assignments to cooperative extension. Nevertheless, although administration of Agency 229 programs is in the custody of CALS, the programs themselves (Agricultural Experiment Station and Cooperative Extension) serve the university mission at large and engagement of COE in delivery of these programs would have potential benefits.
- Based on analysis of instructional resources (FTE) committed relative to undergraduate course enrollments, a temporary faculty hiring freeze (in conjunction with more detailed analysis of staffing and faculty composition) is recommended.

Humanities Departments: Strategic Considerations

In addition to History, two other humanities departments (Modern and Classical Languages and Literatures, Religion and Culture) were ranked in the bottom quartile of all departments in the analysis. While the decline of major enrollments in humanities fields is a national trend, it is also understood by the committee that study of these disciplines is an essential element in delivery of a liberal arts education and, therefore, must be well represented in the university curriculum. However, declining enrollments and imbalances between faculty FTEs and instructional needs must also be addressed as the university has a duty to ensure that limited financial and other resources are used effectively and efficiently. Ongoing attention needs to be paid to student demand and interest in the related majors and minors, and innovative thinking should be applied to how these departments and programs are structured now and into the future to best balance the needs of the overall university, the scholarly contributions of our faculty, and the needs and related employment opportunities of students.

In addition to organizational structures of Modern and Classical Languages & Literatures and Religion & Culture, rigorous review of academic programs delivered by these three departments is necessary, with particular attention given to enrollments, graduation rates, and whether majors and minors could be revised in accordance with student interest and career needs. It is noted that CLAHS began annual capacity analyses in 2022-2023 in an ongoing effort to improve enrollments, phase out underperforming programs, reform timetable management, and reallocate resources. This process, along with implementation of the CLAHS 2030 plan launched in August 2025, has yielded several positive changes and intensive work in these areas continues. It is further acknowledged that these departments have significant efforts underway aimed at addressing many of these known challenges.

Modern and Classical Languages and Literatures

General Comments: Five of six majors and eight of fourteen minors declined in undergraduate enrollments since 2019. Nine languages are represented in curricular offerings overall, although only six at the major level. Decreases in undergraduate enrollments in departmental majors generally exceed national averages. The only major with an increase in application numbers over this period was “Classical Studies” and while “Arabic” experienced a peak the year after it was introduced, it declined sharply in the past two years. There have been accompanying decreases in degree production over the same period, and 4- and 6-year graduation rates are mixed in terms of benchmark levels. There has been only one substantially enrolled master’s program (of seven), but this program is being discontinued and is currently completing its teach-out. The department is overstaffed as compared to peer benchmarks (95th percentile for number of faculty) and while faculty have strong performance benchmarks, the department has had a negative financial ROI since 2019. In response to many of these factors, the department is already making significant efforts toward improvements on many fronts, including faculty staffing levels, curriculum overhaul, workload management, timetable management, and revitalized student recruitment efforts.

Recommendations:

- The committee recommends that the department assess the current and future representation of languages in the curriculum and prioritize those that are most relevant to the strategic position of Virginia Tech and the anticipated future interest of students. While this process is expected to be challenging, it is necessary to address the somewhat complicated organizational structure as it relates to majors and minors.
- Until a clearer understanding of program priorities is reached, a temporary faculty hiring freeze is recommended.

Religion and Culture

General Comments: Overall, degree conferral has declined during the evaluation period and currently is very low (7 students in AY25). Undergraduate enrollments are mixed – the Religion and Culture major trending upwards and the Humanities for Public Service trending downwards. However, both are low and together approximate fewer than 50 students. The undergraduate program is expected to fall below SCHEV productivity requirements in the near future. The department appears to be overstaffed (87th percentile relative to benchmarked peers). It is well regarded nationally but has a low financial ROI.

Recommendations:

- While the committee was in the process of conducting the review, the College of Liberal Arts and Human Studies announced plans to close this department and discontinue its degree programs as part of the college's CLAHS 2030 Vision plan. The committee supports this plan on the basis of low enrollment, declining number of degrees conferred and imbalance between faculty numbers and student interest.
- The committee recognizes that the department hosts the Appalachian Studies minor, which is not specific to Religion and Culture but serves the whole college. The college is in the process of assessing how this minor and other areas of study such as the Judaic Studies minor can be sustained by affiliation with other academic programs in CLAHS.

Materials Science and Engineering

General Comments: The department has experienced a consistent decline in both undergraduate and graduate enrollments, despite being ranked in the top 35 of similar programs nationally. While faculty size is just above average as compared to peers, faculty productivity and recognition benchmarks are low (13th percentile on overall faculty productivity and 51st percentile on faculty size). The department has experienced significant leadership challenges in recent years and now has interim leadership in place. Enrollment data suggest that although this discipline makes essential contributions across many other disciplinary areas, several of which are highly relevant to Virginia Tech's goal of global distinction, it may be diminishing in its independent identity among engineering disciplines.

Recommendations:

- Serious consideration should be given to dissolving this department and its degree programs and distributing faculty talent and courses across other engineering departments.
- Based on analysis of instructional resources (FTE) committed relative to major course enrollments, a temporary instructional faculty hiring freeze (in conjunction

with more detailed analysis of staffing and faculty composition) is recommended, pending possible department closure. The committee understands that efforts are already underway to address structural resource alignment needs.

Science, Technology, and Society (STS)

General Comments: The department offers graduate degrees at MS and PhD levels (total enrollment of approximately 50 students) and no undergraduate majors. Enrollment in the Science & Technology Studies master's degree (10 in 2025-26) is anticipated not to meet SCHEV productivity requirements in the future based on its enrollment trend. Considering the student-to-faculty ratio of approximately 3.4:1 (2.4:1 for doctoral), the department has significant capacity available to accomplish research and scholarship. A preliminary assessment of extramurally-funded research indicated that sponsored expenditures were very low until FY25, when expenditures increased to \$475K from \$158K the previous year (3 faculty accounted for approximately 70% of the extramural research expenditures). The committee acknowledges that types of scholarship other than those that need to be supported by extramural funding also need to be considered in further evaluation of faculty productivity, such as production of books and monographs. The financial ROI is low, averaging 43% of expenditures covered by tuition/fee revenue and extramural research during the period FY19 through FY25. The high cost of this department is a consequence of overstaffing, a lack of undergraduate instructional revenue, relatively low extramural research funding, and an emphasis placed on doctoral education, which does not generate meaningful revenue. Many of the department's students (typically 30-50%) are non-traditional, part-time students, which contributes to a longer time-to-degree. It is not clear what interdisciplinary domain is of particular interest to the department and how this interest differs from other CLAHS interdisciplinary programs under development, such as the those represented in the Academy of Transdisciplinary Studies and the Tech for Humanity project.

Recommendations:

- As mentioned above, CLAHS has a number of interdisciplinary programs established or under development, and has access to interdisciplinary units outside of the college, such as research institutes, that are designed to convene and resource interdisciplinary projects. The committee recommends that the mission of STS be reviewed to differentiate it from other interdisciplinary programs that bring together disciplines similar to those represented in the department. Alternatively, and preferentially, consideration should be given to dissolving the department and distributing faculty across other college units engaged in interdisciplinary studies.
- Pending assessment of the department's mission and domain of interest, and possible implementation of organizational realignment, the committee recommends a temporary instructional faculty hiring freeze (in conjunction with more detailed analysis of staffing and faculty composition).
- The Science & Technology Studies MS degree (CIP 301501) is projected to fall below SCHEV productivity standards in the coming years, with enrollments already below thresholds and degree production expected to follow. Discontinuation of this graduate degree is recommended in conjunction with departmental-level recommendations above.

School of Education

General Comments: The committee acknowledges that the School of Education was not included in the initial review of bottom-quartile departments and, therefore, was not consulted during the qualitative phase of analysis. Nevertheless, the committee's subsequent review of SCHEV degree productivity data and the recent listing of the

master's degree in Curriculum and Instruction in a federal database of programs with low earning outcomes have raised sufficient concerns to include the school in the list of departments in need of further review in regard to organizational structure and academic programs. The school has a long history of important contributions and plays a critical role in supporting instructional innovation and training of teachers. It has also had several changes in administrative leadership in recent years and has had to adapt to changes in state requirements for teacher certification. Another challenge relates to the cost of tuition in comparison with other state institutions. The committee acknowledges that there have been efforts to revise the curriculum and streamline instructional delivery.

Recommendations:

- A comprehensive review of the school's organizational structure, disciplinary scope and associated degree programs is recommended, including deeper analysis of the performance of majors within new undergraduate degrees. There are likely significant opportunities for strategic updates and realignments. This should include participation from other departments and colleges that rely on or partner with the school to credential students for teaching in other fields.
- Considering the challenges related to the cost of graduate education for teachers, review of programs is recommended to identify those that are particularly well suited to Virginia Tech in regard to their differentiation from programs offered by other institutions in the state.
- Pending further review, discontinue Higher Education & Student Affairs Master's degree (CIP 130406) and Career & Technical Education Master's Degree (CIP 131320), which are not expected to meet SCHEV productivity thresholds. The committee notes that the Educational Statistics and Research Methods Doctoral degree (CIP 130603) has already been discontinued. It may be worth investigating whether graduate certificates may better fill these specialized needs for interested students.

Recommendations for At-Risk Degrees

The following degree program recommendations are based on an analysis of thresholds set for degree enrollment and conferral of degrees (consistent with anticipated SCHEV program productivity requirements), using 5-year rolling averages. Note that the standard used is a minimal level of performance and that colleges are encouraged to identify additional programs that no longer meet strategic goals of the university and/or involve a commitment of resources not justified by student interest.

Degree programs expected not to meet pending SCHEV requirements:

The committee recommends that the following degrees be reviewed and action taken per anticipated SCHEV threshold minimums. Current degrees not meeting pending SCHEV productivity standards (anticipated approval in January 2026) include the following:

Dept, College	Degree Description	Degree Level	CIP Code
SOVA, AAD	Creative Technologies	Master's degree	100304
SOVA, AAD	Material Culture & Public Humanities	Master's degree	301201
AOE, COE	Ocean Engineering	Master's degree	142201
ME, COE	Nuclear Engineering	Master's & doctoral degrees	142301

AAD – School of Visual Arts – MFA in Creative Technologies and MA in Material Culture and Public Humanities (MCPH)

- Both degree programs are likely to be flagged in the SCHEV analysis for enrollments and degree production, as both have declining enrollments and low enrollments overall.
- Note that discontinuation of both degrees would leave SOVA without a graduate program.

Recommendation: As Creative Technologies is better aligned with Virginia Tech’s strategic areas of strength, it is recommended that the MA in MCPH program be discontinued and SOVA formulate a plan for strengthening the MFA in Creative Technologies in conjunction with SOPA and the Institute for Creativity, Arts, and Technology.

COE – Aerospace and Ocean Engineering (AOE) – MS in Ocean Engineering

- This degree program is expected not to meet SCHEV productivity requirements in terms of both enrollments and degree production. The degree offers thesis and non-thesis degree options. It would not be flagged if it were aggregated with undergraduate data in AOE, but this is not possible because it has a different CIP code.

Recommendation: Investigate the feasibility of incorporating the curriculum as a track or option in the Aerospace MS degree (possibly to be retitled) and close the standalone MS in Ocean Engineering.

COE – Mechanical Engineering – MS and PhD in Nuclear Engineering

- While these programs are not expected to meet SCHEV program productivity requirements, the master’s program is experiencing modest growth and likely to meet requirements in future. This is also a discipline of anticipated strategic and career interest and need.

Recommendation: The Department of Mechanical Engineering should review the programs and as necessary formulate plans to update them to address the anticipated needs for this expertise as demand for power generated by nuclear reactors grows and should continue to pursue growth in enrollments.

Degree programs tracking toward not meeting SCHEV standards:

While the following degrees currently meet SCHEV productivity standards, they are marginal and are expected to fall short of requirements based on projection of enrollment trends using the most positive aggregation (combination of any two: BS, MS/MA, or PhD degree programs):

CIP Code	Description	Degree Level	Dept/College
141401	Environmental Engineering	Master's degree	CEE, COE
142701	Systems Engineering	Master's degree	ISE, COE
030299	Natural Resources	Undergraduate	FREC, CNRE
400605	Management & Policy; Water Resources and Policy Management**	degree	

** This has been through a CIP code change, but enrollments are still below threshold.

Recommendations:

- The Environmental Engineering master's degree has low and steadily declining enrollments. It also is negatively reflected in SCHEV's analysis because no other degrees have the same CIP code, which would allow aggregation. Integration of the degree with the Environmental Science and Engineering Master's degree is recommended. This would involve a change in CIP code, which would need to be approved by SCHEV.
- While the Systems Engineering degree is at risk of not meeting SCHEV standards, there is evidence of steadily increasing enrollments in recent years. It should also be noted that this is a professional degree program and many of the enrolled students are part-time. SCHEV's data analysis focuses on student FTE, not student headcount, so the program appears smaller than it is. A clear justification will need to be developed in response to the anticipated SCHEV negative assessment.
- The Hydrology & Water Resources Science undergraduate degree recently transitioned from the Natural Resources Management & Policy CIP code. Tracking the degree through both CIP codes indicates marginal and possibly declining performance. The committee recommends that the Department of Forest Resources and Environmental Conservation and the College of Natural Resources and Environment conduct a comprehensive review of this program's potential, especially in light of the recent submission of a MS in Water Resources degree proposal to SCHEV. While the latter is proposed to be housed in the Graduate School, it is reasonable to anticipate that enrollment in a new graduate degree, if approved by SCHEV, may be dependent in large part on enrollment in the undergraduate degree.

Further Administrative Recommendations

- Minimum course enrollment requirements. As noted in Appendix C, many courses that do not meet minimum enrollment requirements have nevertheless been approved at the academic unit level for instruction. This practice results in inefficient use of instructional resources. The committee recommends that approval for instruction of under-enrolled courses occur only at the level of the Provost's Office (Registrar) and that this be done only in very limited and extenuating circumstances. Further, college leaders should be engaged in conversations about course minimums and the development of course management dashboards to aid unit-level support for these efforts. In administering this process, the registrar may also assess whether policy changes regarding minimums at various levels are recommended for consideration as well as benchmarking minimum enrollment policies at other institutions.
- Pathways. While the general education curriculum has served the university well in advancing liberal education of undergraduate students, comprehensive review and updating of Pathways is needed to accomplish the following as well as other possible improvements:
 - Following suspension of Core Concept 7, review of the educational goals of Concept 7 is needed and how the goals may be met across the Pathways curriculum, in compliance with current legal guidance. This work is underway, led by the Undergraduate Curriculum Committee on General Education (UCCGE), which reports to the Commission on Undergraduate Studies and Policies (CUSP).

- Evaluation of the total number of Pathways courses as well as course topics should be conducted to confirm relevance of courses to the goals of general education. This will likely result in a significant reduction in the number of Pathways courses and is already underway in CLAHS.
- Considering the anticipated importance of artificial intelligence in all career pathways, a plan to incorporate AI learning outcomes across the curriculum is needed. As a first step in exploring this, Virginia Tech is participating in the AAC&U Institute on AI and the Curriculum.
- Further restriction of the PIBB-derived benefit of teaching courses with excessively large enrollments is needed to balance enrollments across Pathways courses (referenced also below in “Large online course offerings”).
- To facilitate ongoing improvement, dissemination and communication of the process and periodic timeline for comprehensive review and revision of Pathways is needed.

Acknowledging the necessary role that faculty play in the design of curriculum, the committee recommends that review and recommendation of changes to Pathways be accomplished by a working group, led by the UCCGE, and supported by the Vice Provost for Undergraduate Academic Affairs and the Organizational Excellence unit.

- Cross-listing of courses. Course cross-listing unnecessarily complicates assessment of program productivity, especially when done across courses delivered by the same college. The committee recommends charging a working group to review this issue, clarify whether the perceived benefits are sufficient to justify the practice, and make recommendations concerning course cross-listing.
- Undergraduate minors. Opportunities exist for evaluating minors to establish minimum enrollment requirements, identify opportunities to streamline offerings, and evaluate whether closely related minors offered within the same college meet an appropriate interdisciplinary expectation. Additionally, there appears to be duplication in some areas in regard to similar disciplinary minors being offered across different colleges as well as in the Pathways curriculum. These assessments should be undertaken with careful consideration to potential impact on student access and related issues concerning federal student financial aid.
- Large online course offerings. Concerns have been expressed that these courses may not meet university expectations for student engagement in learning, that they may negatively impact enrollment in other impactful courses, and that they distort allocation of funding in accordance with the PIBB model. The committee recommends the following actions:
 - Make use of established course quality standards and metrics to confirm academic rigor.
 - Shift PIBB incentives away from large enrollments, estimated at the course level, and adjust the budget allocation model in favor of resource utilization rather than enrollments. Consider a modality-sensitive SCH rate for the PIBB that recognizes the differential rate of instructional effort per student in different instructional modalities and work with colleges to determine mutually agreeable long-term solutions.

Future Academic Resource Alignment Reviews

The committee recommends that Virginia Tech's undergraduate and graduate educational programs be reviewed on a regular basis to confirm and, as necessary, update the university's alignment with student interest and career success, and to optimize utilization of instructional resources. To accomplish this task, it recommends the following:

- Establish a working group to draft policies and procedures for regular review of the university curriculum and its constituent courses and degree programs. Policies should include appointing a standing Academic Resource Alignment Committee tasked to meet periodically to assess the curriculum and evaluate progress accomplished in improving it.
- Regarding frequency of review, assessment of quantitative data every two years and additional comprehensive qualitative analysis every four years is recommended.
- Review of quantitative data would be facilitated by developing dashboards for use by unit-level academic leaders and adding these to the [University Data Commons](#).
- Include Summer and Winter sessions in future analyses, as these instructional periods represent an important part of the university's overall instructional portfolio.
- Recognizing that SCHEV productivity requirements serve as a minimal performance standard, establish more stringent expectations for academic review that are well aligned with Virginia Tech's mission and strengths.
- Continue to assess quantitative data in light of the particular context of academic units, including the types of degree programs offered, accreditation standards, and strategic relevance.
- Expand quantitative metrics to include more outcomes related to post-graduation success (federal gainful employment data, educational loan repayment, compensation, etc.) and utilization rates of resources (space, curricular schedule, instructional FTEs, etc.).

Appendix A: Composite Index of Academic Department Metrics

Composite Ranking of Academic Departments based on Select Criteria

	Determine Weights															Unweighted Composite Ranking	Weighted Composite Ranking
	Fall 2024 Enrollment (20%)				AY2023-24 Offering SCH (20%)		AY2023-24 SCH per Instructional FTE (20%)		AY2023-24 Degrees Conferred (20%)		Direct Instructional Costs and Revenue (20%)						
	Undergrads	Master's	Doctoral	Change from Fall 2019	Undergraduate	Graduate	All	Change from AY2019	All	Change from AY2019	UG Cost per SCH	UG Net per SCH	MS Cost per SCH	MS Net Per SCH			
	4.00%	4.00%	6.00%	6.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	7.00%	3.00%	7.00%	3.00%			
Computer Science	66	67	67	66	66	67	59	60	67	65	53	46	46	60	61	62	
Aerospace and Ocean Engineering	56	61	60	54	42	62	53	64	59	59	33	60	55	54	55	55	
Business Information Technology	67	13	24	59	62	59	61	45	66	58	38	16	54	58	49	52	
Management	57	21	22	60	63	49	65	55	53	52	48	42	42	56	49	51	
School of Architecture	51	58	37	36	57	55	38	66	51	50	46	65	47	61	51	51	
Biological Sciences	65	42	56	27	61	51	43	43	62	54	52	31	49	45	49	50	
Biomedical Engineering & Mechanics	29	50	47	65	60	56	64	67	31	53	58	64	11	10	47	50	
Electrical and Computer Engineering	61	65	66	47	52	66	31	36	65	33	18	52	39	49	49	47	
Mechanical Engineering	63	57	65	39	50	64	24	50	64	32	23	63	31	34	47	46	
School of Communication	60	48	4	58	55	15	49	57	55	42	59	38	59	39	46	46	
Chemistry	37	10	62	53	64	57	54	29	27	36	63	49	20	28	42	44	
Population Health Sciences Dept	38	53	17	67	32	45	48	25	43	67	65	39	30	27	43	43	
Civil & Environmental Engineering	49	63	61	25	44	63	22	51	63	27	16	58	34	30	43	43	
Sociology	50	26	43	10	56	31	52	53	50	43	55	27	24	21	39	42	
Finance, Insurance & Business Law	64	21	16	55	53	22	58	48	61	38	32	21	23	48	40	42	
School of Plant & Environmental Sci	43	49	53	40	36	48	57	65	37	24	37	44	14	15	40	41	
Industrial and Systems Engineering	47	55	59	38	37	61	27	26	58	45	24	57	16	37	42	41	
Accounting & Information Systems	46	54	19	29	55	53	55	33	48	17	43	34	33	46	40	41	
School of Design	39	24	4	26	59	10	67	40	33	39	64	61	48	59	41	40	
School of Animal Sciences	55	45	43	30	23	46	56	63	47	36	7	5	41	41	38	40	
Marketing	53	3	19	46	47	17	60	59	57	56	42	25	2	4	35	40	
Political Science	62	46	11	18	51	21	47	49	60	26	45	20	44	40	39	39	
Psychology	52	10	55	21	46	41	40	7	56	48	47	19	53	35	38	39	
Human Nutrition, Foods & Exercise	59	51	36	22	43	47	62	22	54	21	49	32	12	19	38	39	
School of Pub & Internat Affairs	17	59	58	13	21	60	10	56	42	49	39	29	32	36	37	38	
Economics	41	22	47	61	48	24	50	52	36	15	57	47	7	8	37	38	
Mathematics	33	47	49	17	67	44	45	20	35	19	60	54	13	14	37	37	
Dept. of Engineering Education	5	3	45	44	40	42	33	58	5	66	40	55	19	25	34	37	
For Resources & Environ Conserv	41	44	30	43	24	33	35	47	38	40	19	41	45	44	37	36	
Fish and Wildlife Conservation	35	44	44	49	15	39	20	54	32	44	12	13	58	51	36	36	
Geosciences	20	31	48	63	35	40	25	34	13	55	35	56	27	33	37	36	
Statistics	18	34	55	51	45	58	37	32	14	12	61	45	18	16	35	36	
Philosophy	24	29	11	62	27	12	44	18	20	64	54	40	61	42	36	35	
Physics	34	7	57	33	58	54	46	9	22	22	62	53	10	7	34	35	
Myers-Lawson School of Construction	48	38	31	16	31	32	30	19	46	41	26	59	52	50	37	35	
School of Education	30	62	64	42	13	65	11	46	49	18	9	1	43	32	35	35	
English	32	52	27	15	65	36	21	21	39	16	25	37	57	43	35	34	
School of Visual Arts SOVA	31	34	4	37	33	13	19	61	24	46	30	62	51	47	35	34	
Geography	27	40	22	35	39	18	51	3	28	23	56	48	56	53	36	33	
College of Natural Resources	5	60	11	57	5	52	3	40	34	63	2	4	50	57	32	32	
CALS Administration	5	56	11	64	18	27	3	40	12	57	36	50	38	31	32	30	
Agricultural & Applied Economics	28	40	32	52	34	34	41	4	26	25	51	26	9	11	29	29	
Biochemistry	45	19	26	23	19	25	42	44	40	37	29	22	4	3	27	29	
School of Neuroscience	54	10	33	31	26	16	23	28	52	62	17	6	1	1	26	29	
Dean of Science	58	17	16	48	30	4	66	1	44	60	5	3	-	-	25	28	
Entomology	5	36	29	28	7	29	36	10	5	61	20	17	60	52	28	27	
Blackwood Department of Real Estate	44	7	4	45	16	4	63	24	29	47	31	51	-	-	26	27	
Human Development & Family Science	42	13	40	2	28	23	32	17	45	11	50	15	25	22	26	27	
Chemical Engineering	26	15	50	11	17	43	16	35	30	14	8	11	21	12	22	24	
Hospitality and Tourism	25	7	20	20	25	26	34	31	16	10	28	24	17	55	24	23	
Dean of Business	5	64	52	24	4	4	5	40	42	34	34	28	-	-	24	23	
Graduate School	5	66	63	6	2	50	3	40	1	30	-	-	35	23	23	23	
History	19	31	11	4	38	11	18	11	16	13	44	35	29	24	22	20	
Materials Science & Engineering	16	26	34	3	22	38	13	16	23	6	6	12	40	29	20	20	
Food Science and Technology	14	36	29	56	11	20	39	2	10	4	10	10	37	26	22	20	
Apparel, Housing and Resource Mgmt	36	15	4	32	29	4	28	27	22	8	41	23	-	-	19	19	

Composite Ranking of Academic Departments based on Select Criteria

	Determine Weights														Unweighted Composite Ranking	Weighted Composite Ranking
	Fall 2024 Enrollment (20%)				AY2023-24 Offering SCH (20%)		AY2023-24 SCH per Instructional FTE (20%)		AY2023-24 Degrees Conferred (20%)		Direct Instructional Costs and Revenue (20%)					
	<i>Undergrads</i>	<i>Master's</i>	<i>Doctoral</i>	<i>Change from Fall 2019</i>	<i>Undergraduate</i>	<i>Graduate</i>	<i>All</i>	<i>Change from AY2019</i>	<i>All</i>	<i>Change from AY2019</i>	<i>UG Cost per SCH</i>	<i>UG Net per SCH</i>	<i>MS Cost per SCH</i>	<i>MS Net Per SCH</i>		
	4.00%	4.00%	6.00%	6.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	7.00%	3.00%	7.00%	3.00%		
Mining and Minerals Engineering	13	17	26	34	8	19	8	62	8	5	1	8	26	17	18	18
Modern & Classical Languages	22	41	14	5	41	9	9	8	25	7	13	7	36	38	20	18
Ag, Leadership&Community Education	10	27	38	20	12	37	26	5	5	2	15	9	28	18	18	17
Biological Systems Engineering	15	32	41	9	9	35	17	14	16	9	3	36	8	13	18	17
School of Performing Arts	23	29	11	7	49	8	12	6	18	20	21	14	5	5	16	17
Biomedical Science	5	37	51	50	2	4	6	13	9	51	-	-	-	-	16	16
Dean-Liberal Arts & Human Sciences	5	3	36	1	6	30	3	40	3	30	11	2	15	9	14	16
Religion and Culture	11	3	4	41	20	7	14	15	7	30	27	18	6	6	15	16
Science, Technology, and Society	5	24	40	12	14	28	7	23	2	1	22	33	3	2	15	15
Agriculture Technology 2-year Prog.	12	3	4	8	2	4	29	30	19	30	14	30	-	-	13	15
Sustainable Biomaterials	21	17	22	14	10	14	15	12	11	3	4	43	22	20	16	14
	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67

Notes:

- 1) Major enrollments include primary and secondary majors
- 2) Excludes UG major enrollments that do not lead to an anticipated degree, including LFSC, CAUS, AAD, BUS, GE, LAU, LAHS, ESCI, NR, US, XT; and professional DVM and MD programs.
- 3) All IGEPS and the Individualized PhD are combined in under "Interdisciplinary Graduate Education Program".
- 4) Excludes the 1 MS enrollment in Dean - Veterinary Medicine
- 5) Includes International Studies enrollment in Political Science

Available: [Composite Academic Department Ranking Revised Feb 2025.pdf](#)

Appendix B: SCHEV-Based Degree Program Productivity Review Data

Academic Resource Alignment Fiscal Year 2025 Review

SCHEV Program Productivity Review

		Bachelors				Masters				Doctoral			
		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average	
		Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree
010000	Agricultural Sciences	36	9	51	13	18	6	69	32	14	3	-	-
010102	Agribusiness	36	9	133	33	18	6	-	-	14	3	-	-
010103	Agricultural and Applied Economics	36	9	-	-	18	6	17	11	14	3	1	-
010901	Animal and Poultry Science	36	9	642	150	18	6	25	11	14	3	50	9
010905	Dairy Science	36	9	66	20	18	6	2	2	14	3	-	-
011001	Food Science and Technology	36	9	93	23	18	6	15	5	14	3	-	-
011101	Plant Science	36	9	91	-	18	6	-	-	14	3	-	-
011102	Crop And Soil Environmental Sciences	36	9	28	19	18	6	16	5	14	3	33	7
011103	Horticulture	36	9	62	28	18	6	4	2	14	3	6	2
018101	Biomedical and Veterinary Sciences	36	9	-	-	18	6	17	10	14	3	67	8
030104	Environmental Science	36	9	225	39	18	6	-	-	14	3	-	-
030201	Natural Resources	36	9	-	-	18	6	116	84	14	3	-	-
030299	Natural Resources Management and Policy, Other	36	9	31	13	18	6	-	-	14	3	-	-
030301	Fisheries And Wildlife	36	9	-	-	18	6	33	8	14	3	31	5
030501	Forest Resources and Environmental Conservation	36	9	304	78	18	6	-	-	14	3	-	-
030510	Forestry And Forest Products	36	9	-	-	18	6	35	16	14	3	32	6
030599	Sustainable Biomaterials	36	9	46	16	18	6	-	-	14	3	-	-
030601	Fish and Wildlife Conservation	36	9	277	66	18	6	-	-	14	3	-	-
040201	Architecture and Design Research	36	9	-	-	18	6	1	-	14	3	29	5
040301	Urban and Regional Planning	36	9	-	-	18	6	47	26	14	3	-	-
040401	Environmental Design And Planning	36	9	-	-	18	6	-	-	14	3	32	5
040601	Landscape Architecture	36	9	71	11	18	6	9	3	14	3	-	-
040902	Architecture	36	9	705	128	18	6	136	46	14	3	-	-
090101	Communication	40	10	957	226	20	7	-	-	16	3	-	-
090199	Communication	40	10	-	-	20	7	22	7	16	3	-	-
100304	Creative Technologies	40	10	-	-	20	7	14	6	16	3	-	-
110101	Computer Science	36	9	1,506	417	18	6	359	162	14	3	282	25
119999	Information Technology	36	9	-	-	18	6	221	166	14	3	-	-
130301	Curriculum and Instruction	40	10	-	-	20	7	116	79	16	3	66	17
130406	Higher Education and Student Affairs	40	10	-	-	20	7	16	9	16	3	16	3

Academic Resource Alignment Fiscal Year 2025 Review
SCHEV Program Productivity Review

		Bachelors				Masters				Doctoral			
		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average	
		Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree
130499	Educational Leadership & Policy Studies	40	10	-	-	20	7	22	8	16	3	76	29
130603	Educational Statistics and Research Methods	40	10	-	-	20	7	-	-	16	3	4	3
131101	Counselor Education	40	10	-	-	20	7	44	18	16	3	11	3
131202	Elementary Education	40	10	108	-	20	7	-	-	16	3	-	-
131205	Secondary Education	40	10	57	7	20	7	-	-	16	3	-	-
131320	Career and Technical Education	40	10	-	-	20	7	16	9	16	3	1	-
140201	Aerospace and Ocean Engineering	36	9	759	193	16	5	106	47	12	2	142	22
140301	Biological Systems Engineering	36	9	142	52	16	5	16	8	12	2	40	5
140501	Biomedical Engineering	36	9	201	56	16	5	23	9	12	2	68	10
140701	Chemical Engineering	36	9	279	88	16	5	3	5	12	2	74	9
140801	Civil Engineering	36	9	708	218	16	5	162	95	12	2	166	27
140901	Computer Engineering	36	9	702	193	16	5	168	75	12	2	88	11
141001	Electrical Engineering	36	9	406	120	16	5	103	55	12	2	267	37
141101	Engineering Mechanics	36	9	37	23	16	5	9	7	12	2	45	8
141401	Environmental Engineering	36	9	-	-	16	5	15	11	12	2	-	-
141801	Materials Science and Engineering	36	9	161	57	16	5	16	10	12	2	42	10
141901	Mechanical Engineering	36	9	1,212	362	16	5	131	53	12	2	193	29
142101	Mining Engineering	36	9	86	23	16	5	7	4	12	2	24	4
142201	Ocean Engineering	36	9	-	-	16	5	5	4	12	2	-	-
142301	Nuclear Engineering	36	9	-	-	16	5	12	3	12	2	15	2
142701	Systems Engineering	36	9	-	-	16	5	13	10	12	2	-	-
143201	Macromolecular Science and Engineering	36	9	-	-	16	5	3	1	12	2	35	6
143301	Construction Engineering and Management	36	9	198	55	16	5	-	-	12	2	-	-
143501	Industrial and Systems Engineering	36	9	633	205	16	5	55	41	12	2	124	14
149999	Environmental Science & Engineering	36	9	-	-	16	5	5	2	12	2	51	8
151503	Packaging Systems and Design	36	9	83	27	16	5	-	-	12	2	-	-
160101	Foreign Languages	36	9	59	69	18	6	9	5	14	3	-	-
190101	Family and Consumer Sciences/Human Sciences	-	-	43	-	-	-	-	-	-	-	-	-
190201	Apparel, Housing, and Resource Management	40	10	280	83	20	7	-	-	16	3	-	-
190501	Human Nutrition, Foods & Exercise	40	10	938	245	20	7	13	3	16	3	33	7

Academic Resource Alignment Fiscal Year 2025 Review
SCHEV Program Productivity Review

		Bachelors				Masters				Doctoral			
		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average	
		Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree
190701	Human Development	40	10	523	208	20	7	6	7	16	3	39	7
230101	English	40	10	229	97	20	7	14	6	16	3	-	-
231302	Creative Writing	40	10	-	-	20	7	27	8	16	3	-	-
231304	Rhetoric and Writing	40	10	-	-	20	7	-	-	16	3	20	4
240101	Liberal Arts and Sciences/Liberal Studies	-	-	-	-	-	-	-	-	-	-	-	-
240102	General Studies	-	-	32	-	-	-	-	-	-	-	-	-
260101	Biological Sciences	36	9	1,345	294	16	5	18	6	12	2	83	12
260102	Translational Biology, Medicine, and Health	36	9	-	-	16	5	5	2	12	2	86	13
260202	Biochemistry	36	9	453	111	16	5	10	7	12	2	1	-
260305	Plant Path, Phys And Weed Science	36	9	-	-	16	5	9	2	12	2	26	7
260502	Microbiology	36	9	107	26	16	5	-	-	12	2	-	-
260702	Entomology	36	9	-	-	16	5	-	-	12	2	26	5
261103	Genetics, Bioinformatics & Computational Biology	36	9	-	-	16	5	-	-	12	2	35	5
261104	Systems Biology	36	9	28	10	16	5	-	-	12	2	-	-
261501	Neuroscience	36	9	762	205	16	5	2	-	12	2	17	3
269999	Life Sciences	36	9	8	-	16	5	27	9	12	2	67	12
270101	Mathematics	40	10	221	75	20	7	24	14	16	3	42	8
270501	Statistics	40	10	110	28	20	7	5	7	16	3	59	7
270601	Data Analysis and Applied Statistics	40	10	-	-	20	7	8	11	16	3	-	-
301201	Material Culture and Public Humanities	48	12	-	-	22	7	9	5	18	4	-	-
301501	Science & Tech Studies	48	12	-	-	22	7	5	7	18	4	29	5
304401	Other	48	12	48	-	22	7	13	-	18	4	5	-
307001	Computational Modeling and Data Analytics	48	12	609	144	22	7	-	-	18	4	-	-
380101	Philosophy	48	12	141	37	22	7	17	6	18	4	-	-
380299	Religion and Culture	48	12	39	16	22	7	-	-	18	4	-	-
400404	Meteorology	36	9	153	34	16	5	-	-	12	2	-	-
400501	Chemistry	36	9	254	42	16	5	7	7	12	2	131	19
400601	Geosciences	36	9	109	20	16	5	11	5	12	2	54	8
400605	Hydrology and Water Resources Science	36	9	34	-	16	5	-	-	12	2	-	-
400801	Physics	36	9	251	52	16	5	4	5	12	2	109	11

Academic Resource Alignment Fiscal Year 2025 Review

SCHEV Program Productivity Review

		Bachelors				Masters				Doctoral			
		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average	
		Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree
409999	Nanoscience	36	9	81	19	16	5	-	-	12	2	-	-
410000	Science Technologies/Technicians	-	-	58	-	-	-	-	-	-	-	-	-
420101	Psychology	40	10	716	256	20	7	-	11	16	3	71	11
440401	Public Administration	48	12	-	-	22	7	32	23	18	4	26	4
440501	Public and Urban Affairs	48	12	150	46	22	7	-	-	18	4	-	-
450601	Economics	48	12	300	77	22	7	3	6	18	4	3	-
450602	Applied Economic Management	48	12	68	22	22	7	-	-	18	4	-	-
450603	Economics	48	12	-	-	22	7	-	-	18	4	63	10
450701	Geography	48	12	84	35	22	7	21	10	18	4	7	3
450901	International Studies	48	12	540	136	22	7	-	-	18	4	-	-
451001	Political Science	48	12	631	189	22	7	23	11	18	4	-	-
451101	Sociology	48	12	554	229	22	7	11	5	18	4	29	5
451201	Public and International Affairs	48	12	-	-	22	7	15	7	18	4	50	9
459999	Social, Political, Ethical, and Cultural Thought	48	12	-	-	22	7	-	-	18	4	42	6
500404	Industrial Design	36	9	145	34	18	6	-	-	14	3	-	-
500408	Interior Design	36	9	150	34	18	6	-	-	14	3	-	-
500501	Theatre Arts	36	9	95	28	18	6	13	5	14	3	-	-
500701	Art	36	9	243	57	18	6	-	-	14	3	-	-
500901	Music	36	9	74	19	18	6	-	-	14	3	-	-
512201	Public Health	24	6	303	90	14	5	67	41	10	1	-	-
513101	Dietetics/Dietitian (RD)	24	6	-	-	14	5	30	15	10	1	-	-
520101	Business	48	12	-	-	22	7	-	-	18	4	74	12
520201	Management	48	12	603	197	22	7	215	131	18	4	-	-
520301	Accounting and Information Systems	48	12	514	152	22	7	72	56	18	4	-	-
520601	Business/Managerial Economics	48	12	1	7	22	7	-	-	18	4	-	-
520801	Finance	48	12	1,186	324	22	7	-	-	18	4	-	-
520901	Hospitality and Tourism Management	48	12	195	53	22	7	-	-	18	4	-	-
521301	Business Information Technology	48	12	1,690	479	22	7	-	-	18	4	-	-
521401	Marketing Management	48	12	747	230	22	7	-	-	18	4	-	-
521501	Real Estate	48	12	247	97	22	7	-	-	18	4	-	-

Academic Resource Alignment Fiscal Year 2025 Review

SCHEV Program Productivity Review

		Bachelors				Masters				Doctoral			
		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average		SCHEV Threshold		5-Year Average	
		Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree	Major	Degree
522001	Building Construction	48	12	464	109	22	7	11	9	18	4	-	-
540101	History	48	12	146	53	22	7	16	6	18	4	-	-
990001	Other	-	-	26	-	-	-	-	-	-	-	-	-
990002	Other	-	-	598	-	-	-	-	-	-	-	-	-
990003	Other	-	-	263	-	-	-	-	-	-	-	-	-
990005	Other	-	-	2,707	-	-	-	-	-	-	-	-	-
990007	Other	-	-	12	-	-	-	-	-	-	-	-	-
990008	Other	-	-	-	-	-	-	66	-	-	-	18	-

Available: [SCHEV Based Analysis 2025 Phase 3.pdf](#)

Appendix C: Courses with 2+ low enrollment classes annually over the past 3 years, AY2024-25 offerings

AY2024-25 Courses with Two or More Low Enrollment Classes Annually over the Last Three Years

Fall/Spring Thresholds: Undergraduate classes below 15 enrollments, graduate classes below 6 enrollments

Summer/Winter Thresholds: Undergraduate classes below 10 enrollments, graduate classes below 8 enrollments

Excluding graduate research/dissertation, and undergraduate field study and special study courses

			Summer 2024		Fall 2024		Winter 2024		Spring 2025	
			Class Count	Avg Enrollment	Class Count	Avg Enrollment	Class Count	Avg Enrollment	Class Count	Avg Enrollment
College of Agriculture and Life Sciences										
Entomology	ENT 2264	Bees and Beekeeping Laboratory	-	-	-	-	-	-	3	12
College of Architecture, Arts, and Design										
School of Architecture	ARCH 2015	Architecture II	-	-	6	6	-	-	-	-
	ARCH 2016	Architecture II	-	-	-	-	-	-	5	7
	ARCH 4004	Architecture IV - Option Lab	-	-	5	6	-	-	4	7
	ARCH 4014	Architecture IV - Integrative	-	-	4	11	-	-	5	11
	ARCH 4044	Professional Practice	-	-	4	12	-	-	5	8
	ARCH 4514	Thesis Inquiry	-	-	27	5	-	-	-	-
	ARCH 4515	Architecture V	-	-	20	5	-	-	-	-
	ARCH 4516	Architecture V	-	-	-	-	-	-	20	5
	ARCH 4524	Thesis Documentation	-	-	-	-	-	-	27	5
	ARCH 5115	Media & Environment	-	-	2	2	-	-	-	-
	ARCH 5116	Media & Environment	-	-	-	-	-	-	4	4
	ARCH 5134	Top Arch Hist Theory	-	-	3	2	-	-	-	-
	ARCH 5755	Advanced Design Laboratory	-	-	3	2	-	-	-	-
School of Design	IDS 3234	Topics in Design Theory	-	-	-	-	-	-	5	6
School of Performing Arts	CINE 2064	Intro to Cinema Production	-	-	3	10	-	-	-	-
	CINE 3184	Cinema Production Topics	-	-	-	-	-	-	2	7
	MUS 2214	Class Applied Piano	-	-	2	9	-	-	2	7
	MUS 2514	Individual Applied Voice	-	-	3	6	-	-	3	5
	MUS 3314	Instrumental Ensemble Music	-	-	9	7	-	-	10	7
	MUS 4514	Adv Ind App Voice	-	-	3	2	-	-	3	3
	TA 2404	Intro App Collaborative Tech	-	-	-	-	-	-	2	10
	TA 3014	Theatre Production Lab	-	-	14	3	-	-	9	4
	TA 3104	Sound Technology Topics	-	-	-	-	-	-	2	2
	TA 5415	Production Studio I	-	-	8	1	-	-	-	-
	TA 5416	Production Studio I	-	-	-	-	-	-	7	2
School of Visual Arts SOVA	ART 1004	Studio Art for Non-Majors	-	-	6	10	-	-	6	11
	ART 4504	Topics in Multimedia Studio	-	-	2	13	-	-	-	-
	ART 5604	Creat Digi Tech in Arts & Des	-	-	2	3	-	-	-	-
College of Engineering										
Aerospace and Ocean Enginee	AOE 3054	Experimental Methods	-	-	2	12	-	-	16	13
	AOE 4205	Exper for Ocean Vehicle Design	-	-	2	7	-	-	-	-
	AOE 5334	Advanced Ship Dynamics	-	-	-	-	-	-	2	2
Biomedical Engineering & Mec	BMES 5984	Special Study	-	-	-	-	-	-	2	2
Electrical and Computer Engin	ECE 3274	Electmc Circuits Lab II	-	-	2	8	-	-	-	-
	ECE 4224	Power Electronics	-	-	2	4	-	-	-	-
	ECE 5274	Mod & Cont 3-PH PWM Converters	-	-	-	-	-	-	3	2
	ECE 5606	Stochastic Signals and Systems	-	-	-	-	-	-	2	2
	ECE 5620	Advanced DSP and Filter Design	-	-	-	-	-	-	2	2
	ECE 5984	Special Study	-	-	-	-	-	-	5	3
Materials Science & Engineerir	MSE 3064	Mech Behavior Matls Lab	-	-	2	9	-	-	-	-
	MSE 3324	Elementary Metal Casting Lab	-	-	2	5	-	-	-	-
	MSE 4075	Senior Design Laboratory	-	-	16	4	-	-	-	-
	MSE 4076	Senior Design Laboratory	-	-	-	-	-	-	16	4
	MSE 4424	Materials Laboratory II	-	-	4	8	-	-	-	-
Mechanical Engineering	NSEG 5124	Nuclear Reactor Analysis	-	-	-	-	-	-	3	2
	NSEG 5424	Reactor Thermal Hydraulics	-	-	2	4	-	-	-	-
College of Liberal Arts and Human Sciences										
Modern & Classical Languages	ARBC 1105	Elementary Arabic	-	-	3	13	-	-	-	-
	FL 5134	Language Learning & Pedagogy	-	-	2	2	-	-	-	-
	GER 1106	Elementary German	-	-	-	-	-	-	2	12
	GER 2106	Intermediate German	-	-	-	-	-	-	2	11
	GER 3105	Gram/Comp/Conv	-	-	2	10	-	-	-	-
School of Pub & Internat Affair	UAP 5424	Metropolitan Planning Topics	-	-	4	3	-	-	-	-
Sociology	SOC 4454	Topics in Sociology	-	-	-	-	3	5	-	-

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Excluding graduate research/dissertation, and undergraduate field study and special study courses

			Summer 2024		Fall 2024		Winter 2024		Spring 2025		
			Class Count	Avg Enrollment	Class Count	Avg Enrollment	Class Count	Avg Enrollment	Class Count	Avg Enrollment	
College of Science											
Chemistry	CHEM 1046	General Chemistry Laboratory	-	-	-	-	-	-	-	2	11
	CHEM 3625	Physical Chemistry Laboratory	-	-	2	13	-	-	-	5	11
	CHEM 4014	Survey of Chemical Literature	-	-	2	8	-	-	-	-	-
	CHEM 4124	Instrumental Analysis Lab	-	-	3	6	-	-	-	-	-
	CHEM 4414	Inorganic Chemistry Lab	-	-	-	-	-	-	-	2	9
Dean of Science	SYSB 4066	Research Exper In Systems Biol	-	-	-	-	-	-	-	3	1
Physics	PHYS 2215	General Physics Laboratory	2	6	-	-	-	-	-	-	-
	PHYS 2216	General Physics Laboratory	3	3	-	-	-	-	-	-	-
InterCollege											
University Honors Program	UH 2124	Honors Reading Seminar	-	-	11	9	-	-	-	12	11
	UH 4504	Topics Honors Dis Inn Studios	-	-	-	-	-	-	-	6	9
Pamplin College of Business											
Accounting & Information Syst	ACIS 4024	Info Sys Audit & Con	-	-	-	-	-	-	-	2	9
	ACIS 4124	Gov. & Nonprofit Accounting	-	-	2	5	-	-	-	-	-

Available: [low_enrollment_class_data.pdf](#)