

Plan of Study Requirements

M.S. Building Construction Science & Management (BCSM)

Ph.D. Environmental Design & Planning (EDP)

All graduate students must submit a Plan of Study that meets the minimum Graduate School and Departmental requirements for the designated degree. The Plan of Study must be approved by the student's Advisor and Advisory Committee, the Graduate Chair of Building Construction, and the Graduate School. All courses on the Plan of Study, including supporting courses, must be taken on a letter grade (A/F) basis except for those courses approved to be graded on a pass-fail (P/F) basis only. Audit courses cannot be included on the Plan of Study. After approval by the student's Advisory Committee and the Graduate Chair, the Plan of Study should be entered and sent electronically to the Graduate School for approval.

Format for Plan of Study

The most current course requirement checklists and templates for Plans of Study are available online in the [BC Graduate Guidebook](#). Student Plans of Study must conform to the requirements in force when the Plan of Study is approved. If a student is re-entering the program after a period of absence, the current Plan of Study requirements at the time of re-admission will apply.

Plans of Study must be submitted as a single package of documentation containing all required justifications and forms to the Building Construction Graduate Coordinator. Documents may be submitted in hard copy to the Building Construction Graduate Coordinator, or electronically as a single pdf file. Documentation should include:

- Plan of Study template with appropriate committee signatures.
- [Independent study forms](#) and supporting information, if applicable.
- Transcripts to support transfer credits from other institutions, if applicable, along with justifications and course descriptions for courses being transferred.
- [Course Justification Request](#) for "old" coursework, if applicable.

If physical signatures cannot be obtained for all committee members, electronic signatures will suffice as long as documentation is provided as evidence to support the committee member's approval. A printout of an email from the committee member sent to the chair of the committee will suffice in lieu of a physical signature.

Templates may be downloaded from the BC Graduate Guidebook as follows:

- [M.S. Plan of Study template](#)
- [Ph.D. Plan of Study template](#)

Submittal Process and Timeline for Plan of Study

Multiple steps are required for final approval of a student's Plan of Study. Approvals must be obtained from the student's advisory committee, the BC Graduate Chair, and the Graduate School before the Plan of Study is considered official. The BC Graduate Coordinator plays an important role in this process by providing administrative review to ensure all degree requirements are met.

Research Track M.S. and Ph.D. students are encouraged to consult first with their academic advisors and committees and second with the Graduate Chair and/or Graduate Coordinator to answer questions regarding courses and requirements for the Plan of Study. Industry Track students should consult first with the Graduate Chair and/or Graduate Coordinator during the semester, and with the Industry Track Advisory Committee at the end-of-semester meetings to address any questions. The following timelines apply.

Regular M.S. Students - Research Track

Students in the Research Track of the M.S. BCSM program must submit an approved Plan of Study to the Graduate School no later than the end of their second academic semester, or before the **completion** of 12 credit hours of study. To meet this deadline, students should obtain the commitment of a research advisor to serve as their committee chair, and must recruit two additional faculty to serve as the advisory committee. All three faculty must review the Plan of Study and indicate their approval and commitment to serve on the committee by signing the Plan of Study form.

Students on the Research Track are encouraged to prepare a research abstract no later than the beginning of their second semester. The abstract should be prepared in conjunction with the advisor and is used to recruit committee members, beginning early in the second semester.

Students are required to submit a draft Plan of Study to the BC Graduate Coordinator for administrative review no later than semester break of their second semester. This review will flag any problems that need to be addressed by the student prior to full committee review and approval. Draft Plans of Study should be submitted via email to the BC Graduate Coordinator, who will review and respond with any problems identified. The student will then revise the Plan of Study to address any issues prior to meeting with their committee.

All Research Track students should plan to have a committee meeting near the end of their second semester where the final Plan of Study and preliminary research proposal are reviewed and approved. The approved Plan of Study including all required documentation should then be submitted to the Building Construction Graduate Chair, who will review and approve the document and submit it for Graduate School approval.

Regular M.S. Students - Industry Track

Students in the Industry Track of the M.S. BCSM program must submit an approved Plan of Study to the Graduate School no later than the end of their second academic semester, or before the **completion** of 12 credit hours of study. Students in this track are advised by a standing faculty committee, and are required to meet briefly with the committee at the end of each semester to evaluate progress and meet degree milestones.

During the student's first semester, the Industry Track committee will interview the student, review progress in courses to date, review any proposed transfer credits or old courses, and identify remaining courses that are suggested or required for the student to take. The outcome of this meeting will enable the student to develop a draft Plan of Study that meets the committee's requirements.

During the second semester, the student should submit the draft Plan of Study electronically for administrative review by the BC Graduate Coordinator, no later than semester break of the second semester. This review will flag any problems that need to be addressed by the student prior to full committee review and approval. The BC Graduate Coordinator will review the draft and respond with any problems identified. The student will revise the draft to address any issues and will develop a final Plan of Study.

The final Plan of Study along with all documentation will be reviewed and approved at the end of the semester during the student's regular progress meeting with the Industry Track Committee. The Graduate Chair will participate in that meeting and will also review the Plan of Study at this time, after which it will be entered for approval by the Graduate School.

Accelerated Undergraduate/Graduate (UG/GR) M.S. Students

Students admitted to the Accelerated UG/GR program should meet with the BC Graduate Chair as early as possible when considering their plan of study for this program, and must work with the Graduate Chair to complete the [Accelerated Undergraduate/Graduate Degree and Course Designation Form](#) prior to being admitted to the program. This form will establish which courses can be double-counted toward both undergraduate and M.S. degrees, and these courses will establish the foundation for the student's Plan of Study. The Graduate Chair will also review the student's undergraduate Plan of Study and determine which courses in the M.S. BCSM core are redundant for each student. All core M.S. BCSM courses not approved by the Graduate School for double-counting must be substituted with elective courses to meet minimum credit hour requirements.

During this initial meeting with the BC Graduate Chair, students will choose a track (Research or Industry) and will work with the Graduate Chair to draft a tentative completion schedule that accommodates all track requirements. If the student chooses the Industry Track, they will commence meeting with the Industry Track Advisory Committee during their first semester as an accelerated UG/GR student and will follow all timelines for submitting the formal Plan of Study required of students in that Track.

If the student chooses the Research Track, they should meet immediately with their selected advisor to discuss specific goals and course requirements for their program, and should plan to select an advisory committee no later than the end of their second semester as an accelerated UG/GR student. They will subsequently follow all timelines for submitting the formal Plan of Study required of students in the Research Track.

Ph.D. Students

Students in the Ph.D. EDP program must submit an approved Plan of Study to the Graduate School no later than the end of their third academic semester, based on full-time enrollment. To meet this deadline, students must obtain the commitment of a faculty advisor to serve as their committee chair, and must recruit three additional faculty to serve as their advisory committee. All four faculty must review the Plan of Study and indicate their approval and commitment to serve on the committee by signing the Plan of Study form.

Students in the Ph.D. program are paired with a faculty champion as a condition of admission, and they should work with that faculty to determine an initial research direction and course selection. Ph.D. students should prepare a research abstract as soon as possible and no later than the beginning of their second semester. The abstract should be prepared in conjunction with the advisor and is used to recruit committee members, beginning early in the second semester.

Ph.D. students are required to submit a draft Plan of Study to the BC Graduate Coordinator for administrative review no later than semester break of their third semester. This review will flag any problems that need to be addressed by the student prior to full committee review and approval. Draft Plans of Study should be submitted via email to the BC Graduate Coordinator, who will review and respond with any problems identified. The student will then revise the Plan of Study to address any issues prior to meeting with their committee.

All Research Track students should plan to have a committee meeting near the end of their second semester or early in their third semester where the final Plan of Study and preliminary research proposal or Statement of Intent are reviewed and approved. The approved Plan of Study including all required documentation should then be submitted to the Building Construction Graduate Chair, who will review and approve the document and submit it for Graduate School approval.

Transfer Credits from Other Institutions

No more than 50% of the graded credit hours needed to satisfy the requirements for a Virginia Tech graduate degree may be transferred in from a regionally accredited university. All such credits must have earned grades of "B" or better, have been earned while in good standing in graduate status, and must have been graduate courses (numbered 5000 or higher) at the

institution where the student took the courses. Grades of "S" or "P" are not acceptable for transfer credit. All transfer courses must be acceptable to the student's Advisory Committee and the Graduate Chair. For transfer coursework more than five years old, a Justification of "Old" Course Work form must be filed with the Plan of Study.

Credits from other universities are transferred to a Virginia Tech graduate degree at the time the Plan of Study including those courses is approved by the Graduate School. Transferred courses count only as credit hours and are not included in the calculation of the Virginia Tech GPA. Official transcripts are required before transfer course work can be approved for the Plan of Study.

Research, Project and Report, Practicum or Internship credit hours may not be transferred in from another university to meet Virginia Tech graduate degree requirements (i.e., they cannot be included on the Plan of Study). Credits taken while in undergraduate status or for an undergraduate degree cannot be used as transfer credit for a graduate degree.

Justification of "Old" Coursework

A student's Plan of Study should consist of graduate coursework not older than five years at the time of filing the plan with the Graduate School. In some cases, graduate coursework older than five years may be included on the plan. Justification for inclusion of such coursework should be provided by the student's advisor using the [Course Justification Request](#) form, with the support of the student's advisory committee, at the time of Plan of Study submission. Justification should consist of an explanation of how the student will achieve currency in the subject matter of the old coursework during the time in degree. Examples of how this may be achieved include:

- Taking related courses in the same subject area
- Work experience that requires currency in the subject area
- Certification or professional credentials in the relevant domain that require education for credential maintenance
- Reading original literature in the area as needed for the thesis/dissertation
- Other strategies deemed appropriate by the advisory committee.

Once the Plan of Study is approved, no further justification is required for active graduate students. If a student becomes "inactive" (i.e., is on a Leave of Absence or does not register for a calendar year or more), the student must apply for readmission to the degree program. If readmission is recommended by the Department of Building Construction, the Plan of Study must be reviewed to determine if its content is still appropriate for the degree, and all old coursework must be re-justified at that time.

Auditing Courses

Students may audit a course if they wish to experience the benefit of the course content without receiving a grade for work in that course. Auditing a course requires approval of the instructor for that course and the student's graduate advisor, and is subject to the discretion of the instructor and availability of space and resources for the course. Auditing of laboratory work is not permitted. Students should note that many courses in the Building Construction curriculum require significant team projects and may have extensive in-class team exercises. Auditing courses such as these requires considerable commitment on the part of the auditing student and should be discussed carefully with the instructor to ensure that the auditing student will receive benefit without disrupting the course for other students. Not all courses are appropriate for auditing.

Registration for audit may not be changed to credit, or vice versa, after the last day to add classes without the signature of the instructor, student's major advisor, and the dean of the Graduate School. At the end of the course period, the instructor will determine if an audit is "satisfactory" or "unsatisfactory" based on participation and other expectations set forth at the beginning of the course period. Audited courses do not count toward full-time enrollment and do not count as part of the Plan of Study. In order to follow the governance directive that unsatisfactory audits do not appear on transcripts, the Graduate School drops (on request) any NRs awarded. Therefore, the GPA is not affected. Students are assessed the same rate for tuition and fees for auditing courses as for courses taken for credit.

Changes to the Plan of Study

If necessary, students may make changes to their approved Plan of Study for various reasons., ranging from changes to the semester in which courses are taken, to changing the student's exit option, track selection, advisor, or committee members. All changes to the Plan of Study must be requested and approved using the [Plan of Study Change Form](#). This form must be signed off and approved by the student's advisory committee members, the BC Graduate Chair, and the Graduate School. Specific scenarios include:

Change in Dates for Approved Courses

Changes to the schedule of courses happen frequently, and all students should regularly review their Plan of Study to determine whether it is still accurate in terms of dates courses were actually taken. The [Plan of Study Change Form](#) for this type of change can generally be approved at the next advisory committee meeting of the student. Often, students will wait to file this form until early in their final semester, to cover all changes that occur over time with a single change form.

Change in Courses Taken

Occasionally, a course specified by a student on a Plan of Study will not be offered or will conflict with other offerings, making it impossible for the student to complete that course. In this case, the student should discuss the course with his or her committee and determine an appropriate substitute. The [Plan of Study Change Form](#) for this type of change can generally be approved at the next advisory committee meeting of the student.

Once a course on the Plan of Study has been taken for a grade, it must remain on the Plan of Study. Students may not change their Plans of Study to substitute another course for a course in which they received a poor grade.

Change in Exit Option or Track (M.S. Only)

Students who wish to change their exit option or track may do so, subject to limitations. The Graduate School allows M.S. students to change between Thesis and non-Thesis options (and vice versa) no more than one time. The [Thesis Option Change Request form](#) is required for this change. Changing from Thesis to non-Thesis also requires a decision about whether to remain in the Research Track and complete a Project & Report, or switch to the Industry Track and graduate with an exit examination.

Changes within the non-Thesis option do not require special approval from the Graduate School, but must still be approved by the student's advisory committee and the BC Graduate Chair. This choice requires significant changes in the courses that must be taken to complete the degree. For example, students may change between Research and Industry Tracks, but must meet all course requirements for their new track as specified in the required course list. Track-specific courses (CNST 5084 and CNST 5124) are generally offered only once per year, so a student may need to wait an entire year or obtain special permission to substitute another course in order to meet these requirements.

Students considering a change to their exit option should meet with the BC Graduate Chair as soon as possible to discuss the implications for their degree completion plan. Students who are uncertain about which track is right for them may be able to choose a plan of study that minimizes risk if changes are made later. For instance, required courses for the Industry Track (CNST 5124: Construction Company Management and Business Elective) may be taken as electives by students in the Research Track, and required Research Track courses (e.g., CNST 5084: Methods in Construction Research) may be taken as electives in the Industry Track.

Change in Advisor or Advisory Committee Members

The most significant change in a Plan of Study involves changes to the advisor or Advisory Committee selected by the student. This change may be prompted by changes in the student's Track choice (M.S. only), changes in the research interests or methods used by the student, unavailability of an existing committee member to serve, or conflicts within the existing student-committee relationship.

The purpose of the Advisory Committee is to support each student in achieving his or her goals of study through working with the student to design and approve a Plan of Study, providing advice, conducting required examinations, and regularly assessing the student's progress and accomplishments. Advisory Committee members indicate their commitment by signing the student's Plan of Study, and changes to the Advisory Committee therefore also require review of the Plan of Study and approval by all new committee members.

Since all Industry Track students are by default advised by the same Industry Track Advisory Committee, a student wishing to switch from the Industry Track to the Research Track will also likely need to change his or her advisor and/or committee members to support the research topic of interest to the student. Likewise, students switching from Research Track to Industry Track will also need to change their committee composition to be the standing Industry Track Advisory Committee members. Students considering this option should carefully consider all potential implications before requesting a committee or advisor change.

Changes to the advisor or Advisory Committee will be granted only on approval of all committee members, new and old, and on recommendation by the BC Graduate Chair. The [Change of Committee or Advisor form](#) must be filed with signatures from all current and proposed committee members, and new members may require explanation or information at their discretion about the student's Plan of Study and research plans before approving. In the case that one or more members does not approve the change in the membership of the Advisory Committee, an appeal may be made by either the student or a faculty member to the BC Department Head. If the Department Head considers the appeal to have merit, he/she may then ask the Graduate School for an exception to all members signing the form.

Additional guidelines and requirements for committee member selection and service can be found on the [Graduate School Policy Manual](#) under "Graduate Advisory Committees".