Frequently Asked Questions for Undergraduate Students in Applied Education Studies: Learning, Design, and Technology

List of FAQs:

What is Applied Education Studies?

Applied Education Studies is a type of catch-all degree plan in the College of Education that used to be known as General Education Studies. To make general studies more useful to students, the college took steps around 2020 to create a few undergraduate concentrations that sit under the Applied Education Studies degree plan and provide focus to an otherwise wide open degree. One of these concentrations is Learning, Design, and Technology.

Who is this Concentration Designed For?

The Applied Education Studies: Learning, Design, and Technology (AES:LDT) concentration is designed for students who are interested in working in the Education sector or Education field, but are not necessarily interested in teaching. In fact, this concentration does not lead to any type of licensure that would allow a student to teach in the K-12 schools. Instead, students are directed toward courses that will allow them to design and develop technical educational materials and work in roles such as instructional designer or media developer. Students can also take courses in entrepreneurship if they are interested in creating their own startup to design educational materials (e.g., learning games) or perhaps run their own small business (e.g., fee-based, after-school technology tutoring, coding camps; private instructional design consulting; evaluation).

If I Get This Degree and Decide I Want a Teaching License Later, What are the Options?

After graduating with a B.S. in AES:LDT, if students later decide they are interested in teacher licensure, they will need to enter a separate alternative teacher licensure program to get that license. For example, programs such as Pathway to Practice NC or the Master of Arts in Teaching (MAT) are two alternative licensure options available through NC State's College of Education.

Which Courses Do I Take in AES:LDT? What Does the Curriculum Look Like?

Please refer to the undergraduate curriculum posted online for an eight-semester layout of courses to take in each of four undergraduate years, plus a fifth graduate year for students who wish to continue on for a Master's degree through our Accelerated Bachelor's to Master's (ABM) option explained later in this document. A page view of the curriculum by course categories is also available.

LDT Undergraduate Core and Electives: Learning, Design, and Technology faculty at NC State have designed and offer the following undergraduate courses on campus for students in this concentration. The courses are considered core courses and are required of all graduates. Note, several courses presently carry "special topics" course titles and numbers because they are new (i.e, ECI 296/496), but after they go through the university's course approval process, they will be given a permanent course number:

- ECI 296: Special Topics in Education: Introduction to Instructional Design (required, core)
- ECI 296: Special Topics in Education: Foundations of Learning, Design, and Technology (required, core)
- ECI 386: Special Topics in Education: Artificial Intelligence in Education (required, core)
- ECI 496: Special Topics in Education: Educational Innovation and Entrepreneurship (required, core)

General Education Program (GEP): Students are NC State are required to take a certain number of General Education Program (GEP) courses that provide for a customary interdisciplinary liberal arts education. You will see placeholders on the LDT curriculum for GEP courses that are required and for GEP courses that are recommended. For each GEP slot you see listed on the curriculum, there are typically multiple courses that can be taken to satisfy that requirement. See the GEP course lists online. Since this program is designed to prepare graduates for careers as instructional designers and developers, LDT faculty have compared the instructional designer competencies published by the professional organization IBSTPI against the GEP course lists to make recommendations for the best courses students can take to prepare themselves for careers in this discipline. By following these recommendations, students will be better prepared to enter the field with competencies in written and visual communication, data collection and analysis, assessment, technical materials design, evaluation, project management, and more. Students may choose other GEP courses of interest, but check with your advisor to determine if such courses are a good fit for the program.

500-Level Courses for Students Taking Advantage of the ABM Program: If a student has a GPA of 3.5 at the end of the junior year, they are eligible to apply for our Accelerated Bachelor's to Master's (ABM) program to transition directly into the LDT master's program and earn both their Bachelor's and Master's degrees in five years. The ABM option counts 12 hours of 500-level courses a student takes in their senior year from the LDT master's curriculum as transfer credits, and thereby reduces the number of master's credits a student has to take to earn that degree by 12 (30 normal master's hours - 12 transfer credits = 18 new hours required to complete master's program). We recommend undergraduates opting for the ABM program register for the first three core courses in the LDT master's program during the senior year, pending space availability in those classes (ECI 511, 516, 517). ECI 511 is considered an orientation course for the master's program and the field of LDT and is generally the first course a master's student would take in the graduate program. For their fourth course, the student would choose one further 500-level course taught by LDT faculty (ECI 503, 512, 513, 514, 515, and sometimes ECI 519). See a full description of the ABM program below.

Why Does the LDT Curriculum Have Course Slots for "Teaching Field" if the Degree Does Not Focus on Teaching? What is the Difference Between Course Slots for Teaching Field, Supporting Elective, and Free Elective on the Curriculum?

Since the Applied Education Studies degree plan used to be called General Education Studies, and since students in that general degree might have been exploring the option of a teaching career before moving into a particular teaching content area (e.g., BS in Science Education), the curriculum contained options for "teaching field." Some of this old language has been transferred into the current degree plan, so you will see terms like "teaching field" in the curriculum. This language can largely be ignored, as there is essentially no difference between a course slot for teaching field, supporting elective, or free elective. And there is no requirement to choose courses that focus on "teaching" where you see "teaching field" listed on the curriculum. One of the strengths of this curriculum is that students can work with the college advising team and their LDT advisor to customize their plan of study and courses taken. The curriculum is very flexible and customizable, other than

the aforementioned core and some standard university requirements to take certain General Education Program (GEP) courses and required electives (e.g., history elective, health and exercise course).

Do Students in this Major Take Professional Growth Units (PGUs)?
Professional Growth Units (PGUs) are professional development credits offered in the College of Education for students in teacher licensure majors. They are not required for students in the AES:LDT concentration, but if students are interested in the topics, they can participate in the learning sessions.

Who is My Advisor?
Undergraduate students are advised by the College of Education's advising team until they reach the junior year, then they are assigned to one of the faculty members in Learning, Design, and Technology as their advisor (i.e., Castellanos-Reyes, Huang, Jiang, Martin, McKeown, Oliver). Advisors help students plan courses in their official university "degree audit" that lists all of the required and elective course slots for this particular degree plan.

What Student Organizations Are Available to AES:LDT Majors?
For undergraduate students interested in the entrepreneurship side of this major, we encourage you to join the Campfire portal through the university's main entrepreneurship web site. Once connected to this community, you will learn more about opportunities for student-led projects, entrepreneurship competitions, speakers, and a mentoring program. Students can also join the campus entrepreneurship garage for access to prototyping spaces and equipment to support materials design. Also, NC State has a living-learning community known as the Entrepreneurship Village where students can apply to live, network, and design with a community of interdisciplinary students also interested in entrepreneurship.

The College of Education sponsors these additional clubs and honor societies that may be of interest to students in the major, such as the Bilingual Education Student Organization, the Multicultural Young Educators Network, the Education Council, Student Ambassadors, Epsilon Pi Tau honor society, and Kappa Delta Pi honor society.

What Professional Organizations Are Available to AES:LDT Majors?
NC State's DELTA office sponsors an Instructional Design Interest Group (IDIG) for staff and faculty on campus who practice or have an interest in instructional design. IDIG schedules activities every semester such as webinars and lectures with invited speakers. While primarily geared toward staff and faculty, students with a interest in pursuing instructional design work should contact IDIG leaders to inquire into joining the group. Announcements about future events are shared with group members through the IDIG Google Group platform.

Students in LDT programs at NC State are encouraged to affiliate with the program through its LinkedIn group where resources are shared on relevant conferences, workshops, trainings, internships, and employment opportunities. This virtual space provides a good place to maintain contact with the program after graduation.

One of the primary associations local instructional designers use for networking is the Association for Talent Development (ATD) which has a local Research Triangle Chapter. Students can join the association for $50 per year to attend scheduled learning activities and other social networking events.

In addition to ATD which has a local chapter, at the national level many students entering the instructional design profession may begin to associate with the Learning Guild professional association which sponsors a popular annual conference called DevLearn, recurring webinars and online events, online content for developers, and a job board for members.

What Are the Career Prospects for an AES:LDT Graduate?
O*Net is an online resource that provides data on career prospects in different fields. AES:LDT graduates can search the following related fields for career information:

- instructional coordinator ($62k average wages in NC); 11% projected growth in NC (2020-30); 650 annual job openings projected in NC (2020-30)
- training and development specialist ($61k average wages in NC); 18% projected growth in NC (2020-30); 1250 annual job openings projected in NC (2020-30)

Since many jobs in instructional design require a master's degree, we recommend students in the AES:LDT undergraduate concentration plan to obtain their Master's degree at some point after their Bachelor's to enhance their employment opportunities, as well as take advantage of internship opportunities through such courses as ECI 652 in our LDT master's program. See ABM option below as one mechanism to quickly matriculate through both an undergraduate and graduate program in the field.

What is the ABM (Accelerated Bachelor's to Master's Program), Who is Eligible, and How Do I Apply?
To facilitate our undergraduate students earning both their Bachelor's and Master's degrees in as little as five years, we worked with the Graduate School to formalize an Accelerated Bachelor's to Master's (ABM) program that allows well-qualified students to transition from our Bachelor's concentration into the Master's program with a reduction in the number of credits required for the Master's (typically 30, reduced to 18 through ABM).

Who is Eligible for the ABM Program: Students must have a minimum accumulated grade point average (GPA) of 3.50/4.00 at NC State to apply for the ABM. Students below this 3.5 threshold may still be eligible for admission to the regular (non-accelerated) master's degree program in LDT that requires, among other elements, a minimum 3.00 GPA for unconditional admission. Transfer students interested in the ABM program must have completed a minimum of two semesters as a full-time student at NC State, with a minimum of 24 credit hours taken at NC State out of the total 120 hours required for the B.S.

When Would I Apply for the ABM Program: Undergraduate students should plan their ABM program once they have completed a minimum of 75 credit hours in their B.S. program, and before they have earned 96 credit hours, including credits earned from advanced placement (see step one below). Planning the ABM program during the junior year is preferred, so students can plan to take 12 credits of 500-level courses from the LDT master's program during their senior year which can be applied to both degrees (double counted). Students must apply for the LDT master's program before completing their B.S. degree, and file their ABM plan as part of that application (see step two below).

How Do I Apply for the ABM Program:

1. A prospective student who meets the eligibility requirements should develop an ABM plan of work noting which 500-level courses they will take during their senior year to be double counted, and which courses will be taken in the fifth graduate year. The student should email their signed and completed ABM plan of work to the LDT undergraduate coordinator for review and signature (currently, Kevin Oliver), who will then share the completed file with the department's Director of Graduate Programs (Master's level) for review and signature (currently Dennis Davis). The signed ABM plan of work will be sent back to the student with a copy maintained in the department's files.
2. Students with an approved ABM plan of work will still need to submit a full application to the Graduate School for a master's degree in LDT during the senior semester they will complete their undergraduate degree. The standard application for the LDT master's program consists of a statement of purpose, resume, transcripts, and three recommendations. Also, the student should upload a copy of their signed ABM plan of work in the application to notify the Graduate School that they are an ABM student. This application package to the Graduate School will constitute a formal application to the ABM program in LDT.

LDT faculty will review applications for the master's program on a rolling basis throughout the year, so there is no deadline or timeline for applying, however students planning enroll in fall of a given year should apply early winter (e.g., Dec, Jan for an August enrollment) so there is time for all application materials to arrive at the university (e.g., transcripts) and be processed.

3. After submitting their application to the Graduate School, the student should send an email to the Department's Graduate Services Coordinator Irene Armstrong (irene_armstrong@ncsu.edu), notifying her you have applied to the LDT master's program as an undergraduate ABM student from the LDT program. She will verify your application is marked as an ABM student, so there are no issues with double counting credits from your undergraduate program should you be admitted and enroll in the master's program.

Which Graduate Courses Should I Take in My Senior Year As Part of the ABM Program:
500-level courses that may be taken during the senior year and double-counted include:
ECI 503, Media, Technology, and Open Learning
*ECI 511, Introduction to Learning Design & Technology
ECI 512, Emerging Technologies for Teaching and Learning
ECI 513, Teaching & Learning with Digital Video
ECI 514, Developing and Delivering Online Instruction
ECI 515, Cultural Investigations and Technical Representations in Education
*ECI 516, Design & Evaluation of Instructional Materials
*ECI 517, Theoretical Foundations of Advanced Learning Environments
ECI 519, Special Topics in Learning Design & Technology

The courses we recommend students take in the senior year include those designated as “core” courses for the master's program: ECI 511 (orientation course to master’s program, set up program portfolio), ECI 516 (instructional design foundations), and ECI 517 (theoretical foundations), plus one further elective from the list above. If a student cannot take these core courses during the senior year due to scheduling or the courses being full, it is okay to take them during the +1 graduate year, but the ECI 511 orientation course should be taken as soon as possible as the orientation course for the program. ECI 652 is to be taken as the last course in the program (second semester of +1 year). This course is considered a capstone in which students take on a practical internship type experience and finalize their program portfolio.

Students are required to take all of the “core” courses for the master's program (ECI 511, 516, 517, 652), otherwise they can take any mix of other available courses that best address their goals after graduation (ECI 503, 512, 513, 514, 515, 519). There is no sequence to courses in the LDT program, and they can be taken in any order, other than ECI 511 taken early in the program as an orientation course, and ECI 652 taken last.

If the student completes 12 credit hours of double-counted 500-level courses in the senior year, the additional requirements for the master's degree are:

- M.Ed., 18 credit hours, including three credit hours of the ECI 652 program capstone course (field-based applications of LDT)
- M.S., 24 credit hours, including three credit hours of the ECI 652 program capstone course (field-based applications of LDT), and three credit hours of ECI 695 (master’s thesis research)

In the event the student has less than 12 credit hours of double-counted 500-level courses in their senior year, they will need to take additional credit hours to reach master's program minimums (30 credit hours for the M.Ed., and 36 credit hours for the M.S.), to be reflected in the student’s ABM plan of work.

Are There Any Further Requirements for My Continuing Participation in the ABM Program, Once Accepted:

- Students must complete the B.S. degree prior to entering a master's program. Students in the ABM may not elect to bypass the B.S. degree.
- Any student whose cumulative GPA drops below the established ABM program minimum requirements (3.50 cumulative GPA) before graduating with the B.S. will be ineligible to continue in the ABM program and will only receive the B.S. degree. The student can still be admitted to the master's program, but will not be allowed to double count any credits from the undergraduate program.
- Students must receive a grade of B or better in the double-counted graduate-level courses. Courses with a grade of B- or below cannot be counted toward the graduate degree. All ABM students must maintain a graduate GPA of at least 3.00 in all coursework being counted toward the master's degree, inclusive of courses taken as an undergraduate.
- No more than 12 credit hours may be double counted toward the requirements of both degrees.
- Please note this important timeline: Students must complete the master's degree within 12 months from the completion of the B.S. degree for a non-thesis M.Ed., and within 24 months for a thesis-required M.S. degree. If the master's degree is not completed within these time limits, none of the graduate credit obtained before receiving the B.S. degree can be counted toward the master's degree.

References from AES:LDT Web Site and/or this FAQ

An, Y. (2024). Seasoned scholars' perspectives on the core competencies, programs, research, and future directions of the field of instructional design and technology. *Educational Technology Research and Development, 72,* 895-914. DOI: 10.1007/s11423-023-10302-4