<table>
<thead>
<tr>
<th>What’s your focus?</th>
<th>You may be interested in...</th>
</tr>
</thead>
</table>
| **K12 Special Education**       | • DHD 548 - AT Tools in Education (3 credits)  
• DHD 555 - AT Consideration and Assessment in K12 (3 credits)  
• DHD 544 - AT for Early Childhood (2 credits)  
• DHD 568 - Supporting AAC in Educational Settings (3 credits)  
• DHD 554 - Augmentative Communication Assessment (3 credits)  
• DHD 567 - AAC for Individuals with ASD (2 credits)  
• DHD 594 - Technology to Support UDL (1 credit)  
• DHD 562 - Mobile Tech & Computers: Built-in Accessibility (1 credit) |
| **Transition and Employment**   | • DHD 551 - Computers, Communication and Controls (3 credits)*  
• DHD 554 - Augmentative Communication Assessment (3 credits)  
• DHD 569 - Ergonomics and Safety for Workers with Disabilities (1 credit)  
• DHD 553 - AT for Individuals who are Blind or Visually Impaired (1 credit)  
• DHD 562 - Mobile Tech & Computers: Built-in Accessibility (1 credit) |
| **Community Living and Aging in Place** | • DHD 551 - Computers, Communication and Controls (3 credits)*  
• DHD 556, 557, 558 - Seating and Wheeled Mobility series (1 credit each)  
• DHD 553 - AT for Individuals who are Blind or Visually Impaired (1 credit)  
• DHD 568 - Environmental Modification (1 credit)  
• DHD 441 - Adaptive Equipment Design and Fabrication (3 credits)*  
• DHD 594 - Assistive Technology and Transportation (1 credit)  
• DHD 562 - Mobile Tech & Computers: Built-in Accessibility (1 credit) |
| **Higher Education**            | • DHD 594 - Technology to Support UDL (1 credit)  
• DHD 548 - AT Tools in Education (3 credits)  
• DHD 553 - AT for Individuals who are Blind or Visually Impaired (1 credit)  
• DHD 562 - Mobile Tech & Computers: Built-in Accessibility (1 credit) |
| **Early Intervention**          | • DHD 544 - AT in Early Childhood Settings (2 credits)  
• DHD 554 - Augmentative Communication Assessment (3 credits)  
• DHD 567 - AAC for Individuals with Autism Spectrum Disorder (2 credits)  
• DHD 562 - Mobile Tech & Computers: Built-in Accessibility (1 credit) |
| **Rehabilitation**              | • DHD 554 - Augmentative Communication Assessment (3 credits)  
• DHD 556, 557, 558 - Seating and Wheeled Mobility series (1 credit each)  
• DHD 551 - Computers, Communication and Controls (3 credits)*  
• DHD 553 - AT for Individuals who are Blind or Visually Impaired (1 credit)  
• DHD 594 - Assistive Technology and Transportation (1 credit)  
• DHD 562 - Mobile Tech & Computers: Built-in Accessibility (1 credit) |
| **DIY/Maker in AT**             | • DHD 566 - Intro to Microcontrollers in Assistive Technology (2 credits)  
• DHD 441 - Adaptive Equipment Design and Fabrication (3 credits)*  
• DHD 594 - 3D Printing in Assistive Technology (1 credit) |

* Blended/Lab-based courses at UIC

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ATCP Courses by Area of Concentration*

**Required:**
- DHD 440 Intro to AT (3 cr, Fa, Sp)

**AAC**
- DHD 553 AAC Assessment (3 cr, Fa)
- DHD 587 AAC for Autism (2 cr, Su)
- DHD 568 AAC in Ed Settings (3 cr, Sp)

**Edu Settings**
- DHD 548 AT Tools (3 cr, Fa)
- DHD 555 AT Consideration, Assessment, Documentation (3 cr, Fa, Sp)
- DHD 544 AT in Early Childhood (2 cr, Fa)
- DHD 594 Tech to Support UDL (1 cr, Su)

**Access**
- DHD 553 AT for Blind/VI (1 cr, Fa)
- DHD 562 Built-In Features (1 cr, Su)
- DHD 551 Computers, Communication Controls (3 cr, Sp)
- Also Field Experience option

**Design**
- DHD 566 Intro to Microcontrollers (2 cr, Fa)
- DHD 594 3D Printing (1 cr, Su)
- DHD 441 Design & Fabrication (3 cr, Su)

**Environment**
- DHD 559 Ergo & Safety (1 cr, Su)
- DHD 594 Transportation (2 cr, Su)
- DHD 569 Environ Mod (1 cr, Su)

**Seating & Mobility**
- DHD 556 S&P for Wheelchair Mobility (1 cr, Sp)
- DHD 557 Manual and Powered Wheelchair (2 cr, Sp)

**Electives**
- DHD 590 Field Experience (1 cr, Fa, Su, Sp)

Orange = assessment courses  Fa = Fall, Sp = Spring, Su = Summer

*This flowchart is not intended to predict individual ATCP Plans of Study. Students can choose electives across multiple areas of concentration.*
## ASSISTIVE TECHNOLOGY CERTIFICATE PROGRAM
### COURSE PLANNING CHART

### Spring 2021
January 11-May 7

<table>
<thead>
<tr>
<th>Online Courses</th>
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</table>
| DHD 440 Introduction to Assistive Technology  
Required Course (fall or spring)  
Instructors: All ATCP faculty (3 credits) |
| DHD 555 Consideration, Assessment, and Documentation of AT in PreK-12 Educational Settings  
Instructor: Cochrane (3 credits) |
| DHD 556 Seating and Positioning for Wheelchair Mobility  
Instructor: Sposato (1 credit – first 5 weeks) |
| DHD 557 Manual and Powered Wheelchair Technology  
Instructor: Sposato (2 credit – last 10 weeks) |
| DHD 568 Supporting Augmentative Communication in Educational Settings  
Instructors: Malnar & Politano (3 credits) |

### Summer 2021
June 14-August 6

<table>
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<tr>
<th>Online Courses</th>
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| DHD 559 Ergonomics and Safety for Workers with Disabilities  
Instructor: Hedman (1 credit) |
| DHD 562 Mobile Technology and Computers: Built-in Accessibility Features  
Instructor: Hooyenga (1 credit) |
| DHD 567 AAC for Individuals with Autism Spectrum Disorder  
Instructor: Bay (2 credits) |
| DHD 569 Environmental Modification  
Instructor: Hedman (1 credit) |
| DHD 594 Special Topic: Technology to Support Universal Design for Learning  
Instructor: Skalitzky (1 credit) |
| DHD 594 Special Topic: Assistive Technology and Transportation  
Instructor: Salkas (2 credit) |
| DHD 594 Special Topic: 3D Printing in Assistive Technology  
Instructor: Hooyenga (1 credit) |

### Fall 2021
August 23-December 10

<table>
<thead>
<tr>
<th>Online Courses</th>
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</thead>
</table>
| DHD 440 Introduction to Assistive Technology  
Required Course (fall or spring)  
Instructors: All ATCP faculty (3 credits) |
| DHD 544 Assistive Technology in Early Childhood Settings  
Instructor: Woodson (2 credits) |
| DHD 548 Assistive Technology Tools for Education  
Instructors: Cochrane, Lenzo & Bass (3 credits) |
| DHD 553 Assistive Technology for individuals who are Visually Impaired or Blind  
Instructor: Sessler-Trinkowsky (1 credit) |
| DHD 555 Consideration, Assessment, and Documentation of AT in PreK-12 Educational Settings  
Instructor: Cochrane (3 credits) |
| DHD 594 Special Topic: Assistive Technology and Transportation  
Instructor: Cochrane (3 credits) |
| DHD 594 Special Topic: 3D Printing in Assistive Technology  
Instructor: Hooyenga & Browning (2 credits) |

### Blended/Lab-Based Course at UIC

| DHD 551 Computers, Communication and Controls in Rehabilitation Technology  
Instructors: Hooyenga, Politano & Sposato (3 cr) |
| DHD 441 Adaptive Equipment Design and Fabrication  
Instructors: Hooyenga, Graham & Hedman (3 cr) |

**DHD 590 Field Experience** available all semesters. Availability/design of lab-based courses are contingent on applicable COVID-19 restrictions.

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Oct 2020
Required Courses

DHD 440 - Introduction to Assistive Technology: Principles and Practice (3 credit hours, online)
An examination of best clinical practices and state-of-the-art assistive technology devices, including augmentative communication, cognitive technologies, computer access, environmental modification, job accommodation, seating and wheeled mobility. Funding and outcomes measurement are also covered.

ATCP Field Experience
Choose either DHD 590 (online) or DHD 441 (lab-based at UIC). See descriptions below.

Online Electives

DHD 544 - Assistive Technology in Early Childhood Settings (2 credit hours)
An introduction to the legal foundations of AT in early childhood settings, family-centered approaches to assessment, and an exploration of tools to support participation in home- and play-based activities for children 0-5 years of age. Students also develop a toolkit to support play-based AT assessment. Prerequisite: DHD 440 or consent of instructor

DHD 548 - Assistive Technology Tools for Education (3 credit hours)
Using categories from two school-based AT consideration guides (GPAT and WATI), explore a range of assistive technology features and products that support active participation and learning in educational settings for students with both high and low incidence disabilities from the early grades through transition. AT training strategies are also covered.

DHD 553 - Assistive Technology for Individuals Who Are Blind or Visually Impaired (1 credit hour)
An introductory overview of assistive technology for people who are blind or visually impaired. Topics include screen magnification software, screen reading software, OCR software, braille technologies, low vision devices, smart phone and tablet accessibility features, and other specialized technologies designed for people with visual impairments.

DHD 554 - Augmentative Communication Assessment (3 credit hours)
A course covering a range of augmentative communication assessment strategies and evaluation materials utilizing case examples for discussion of specific approaches for different ages, disabilities, and settings. Students work directly with a wide range of speech-generating devices to conduct feature analyses of systems and to gain hands-on experience using a variety of access methods, rate enhancement techniques and vocabulary expansion tools.

DHD 555 - AT Consideration, Assessment and Documentation in PreK-12 Educational Settings (3 credit hours)
An in-depth introduction to the delivery of AT devices and services in the pre-K-12 educational setting. Students use a case study project to apply the steps of consideration, assessment and documentation. Topics include data design, assessment protocols, and the legal mandates of IDEA. A basic understanding of AT devices is a prerequisite as the emphasis in this course is the service delivery process. Prerequisite: DHD 440 or strong familiarity with AT tools used in educational settings. DHD 548 recommended.

DHD 556 - Seating and Positioning for Wheelchair Mobility (1 credit hour, first 5 weeks of semester)
A focus on seating and positioning assessment for functional use of a manual or powered wheelchair for children and adults with physical disabilities. Emphasis is placed on identifying the appropriate technology to match consumer needs. Course content includes an in-depth look at assessment procedures and seating and positioning technology selection and applicable research. Prerequisite: DHD 440 or consent of instructor

DHD 557 - Manual and Powered Wheelchair Mobility (2 credit hours, last 10 weeks of semester)
An in-depth look at the styles and components of manual and power wheelchairs designed for children and adults with physical disabilities. Emphasis is placed on identifying the appropriate technology to match consumer needs. Content includes information on frame materials and features to guide the manual wheelchair selection process, performance adjustments, transportation standards, access methods, powered seat functions, electronics, programming, and applicable research. Prerequisite: DHD 556

DHD 559 - Ergonomics & Safety for Workers with Disabilities (1 credit hour)
Individuals with disabilities can often achieve employment through the application of sound ergonomic principles, and where necessary, low-to-high-tech job accommodation devices. This course covers the application of these strategies in office and manufacturing environments, as well as the unique issues that individuals with disabilities face regarding emergency evacuation from worksites.

go.uic.edu/ATcertificate  Oct 2020
DHD 562 - Mobile Technology and Computers: Built-in Accessibility Features (1 credit hour)
This course explores the built-in accessibility features that are available in Windows PC, Macintosh, Chromebook, iOS and Android operating systems.

DHD 566 - Intro to Microcontrollers in Assistive Technology (2 credit hours)
In the spirit of DIY projects, this class introduces students to the use of entry-level electronics utilizing microcontrollers such as the Arduino board. Students are guided in constructing projects with an assistive technology focus. Project options include making an adaptive switch to operate a computer game, creating an alternate input control for accessing the computer and/or building a basic EADL/ECU control. No previous experience with microcontrollers is required, only a proficiency with computer use.

DHD 567 - AAC for Individuals with Autism Spectrum Disorder (2 credit hours)
Content addresses how AAC can meet the unique communication needs of individuals with autism spectrum disorders with emphasis on evidence-based modalities and intervention strategies. Topics include supports for social interaction and participation, assessment, and a range of intervention approaches including PECS, visual supports, aided language stimulation, and LAMP.

DHD 568 - Supporting AAC in Educational Settings (3 credit hours)
This course focuses on instruction and intervention for students who use augmentative and alternative communication systems (AAC) in the K-12 setting. Content emphasizes strategies that are classroom-based and can be used in inclusive settings to aid students' language and educational growth. Topics include assessment, literacy, social relationships, collaboration, and academic adaptations.

DHD 569 – Environmental Modification (1 credit hour)
A comprehensive overview of accessibility issues common in private residences and public spaces. National, state, and local codes are used as a framework for addressing the barriers. Accessible design and assistive technology solutions are also investigated.

DHD 590 – Field Experience in Disability & Human Development (1 credit hour)
Students demonstrate their knowledge and skill set regarding the provision of quality assistive technology services. Students either perform direct services at their place of employment or report on observations of direct services by service providers in their geographic area. (Meets ATCP field experience requirement.)

DHD 594 Special Topics Course - Technology to Support Universal Design for Learning (1 credit hour)
An introduction to the framework of Universal Design for Learning (UDL). Technology will be explored through the lens of the three components of UDL: multiple means of representation, multiple means of expression and multiple means of engagement. Participants will explore technologies to support all learners for grades K-12.

DHD 594 Special Topics Course - 3D Printing in Assistive Technology (1 credit hour)
3D printing is an emerging tool within Assistive Technology (AT). This course will cover the basics of 3D printing in AT for customizing and fabricating low-cost adaptive devices without needing to own a 3D printer.

DHD 594 Special Topics Course - Assistive Technology and Transportation (2 credit hours)
This course explores assistive technology in the transportation setting, including private vehicles, public transit, planes, cruise ships, and ride share.

Blended/Lab-Based Courses Taught at UIC
Availability/design of 2021 lab-based courses are contingent on applicable COVID-19 restrictions.

DHD 441 - Adaptive Equipment Design and Fabrication (3 credit hours)
A course covering design theories, idea generation, fabrication machines, hand tool techniques, and appropriate materials that relate to custom design and custom fabrication of low-tech adaptive equipment. Students work in the ATU shop during practice sessions and complete an individual assessment and implementation project based on actual consumer request. (Meets ATCP field experience requirement.)

DHD 551 - Computers, Communication and Controls in Rehabilitation Technology (3 credit hours)
A course exploring different methods for evaluating access methods and controls used to operate computers, communication devices and powered wheelchairs. Instruction also addresses device features and integration factors. Includes hands-on labs.

Questions?
E-mail atcp@uic.edu or call 312-996-1508

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Oct 2020