COMMUNICATION SCIENCES AND DISORDERS, B.S.

Begin Campus: Any Penn State Campus
End Campus: University Park

Program Description
This major offers a comprehensive program of study for preparing students who want to become speech-language pathologists or audiologists. The curriculum is specifically designed for the sole purpose of preparing undergraduate students for graduate study in communication sciences and disorders or related areas. This occurs because state licensure laws and professional certifications require that a speech-language pathologist or audiologist must have a master’s degree, pass a national test, and complete a clinical fellowship year.

Overall, the curriculum enables students to develop fundamental knowledge based on scientific principles, skills, and attitudes required for habilitating and rehabilitating persons of all ages with a wide range of speech, language, and hearing problems. Further, the curriculum allows students an opportunity to explore all aspects of communication sciences and disorders as well as elect courses of special interest.

The first two years of study emphasize general education and background study. The last two years of study emphasize normal and disordered aspects of speech, language, and hearing as well as professional management, concerns, and obligations. Clinical observation and diversity focused coursework are included in the curriculum.

What is Communication Sciences and Disorders?
Communication Sciences and Disorders (CSD) is the study of human communication disorders. Undergraduate students acquire a strong foundation in the basic sciences and processes related to typical, delayed and disordered speech, language, cognition, swallowing, and hearing. Students gain critical-thinking abilities necessary to apply foundational knowledge and skills to the identification, assessment, and treatment of communication disorders. Graduates proceed to advanced degrees in speech-language pathology or audiology to habilitate and rehabilitate children and adults with a variety of disorders and delays through service and research. Speech-language pathologists and audiologists are employed in environments such as schools, hospitals, rehabilitation centers, community clinics and nursing homes.

You Might Like This Program If...
- You know you will find fulfillment in working closely with others.
- You want to pursue a career in a helping profession.
- You envision yourself teaching people skills to improve their quality of life.

MORE INFORMATION (http://csd.hhd.psu.edu/undergrad)

Entrance to Major
In order to be eligible for entrance to this major, a student must:

1. attain at least a C (2.00) cumulative grade-point average for all courses taken at the University; and

2. have third-semester classification (http://www.registrar.psu.edu/registration/semester_classification.cfm).

READ SENATE POLICY 37-30: ENTRANCE TO AND CHANGES IN MAJOR PROGRAMS OF STUDY (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/37-00-entrance-to-a-college-or-major)

Degree Requirements
For the Bachelor of Science degree in Communication Sciences and Disorders, a minimum of 120 credits is required:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>General Education</td>
<td>45</td>
</tr>
<tr>
<td>Electives</td>
<td>27-30</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>54-55</td>
</tr>
</tbody>
</table>

To satisfy graduation requirements, students must have completed 6 credits from courses offered in the college and outside the department in which the major is offered.

Per Senate Policy 83.80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of coursework in the major to be taken at the location or in the college or program where the degree is earned. CSD requires students to complete 24 credits for the major through courses taken at University Park. Courses taken at other Penn State campuses may not be counted toward this 24 credit minimum. For more information, check the Recommended Academic Plan for this major.

General Education
Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (http://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required.)
- Quantification (GQ): 6 credits
- Writing and Speaking (GWS): 9 credits

Knowledge Domains
- Arts (GA): 6 credits
- Health and Wellness (GHW): 3 credits
- Humanities (GH): 6 credits
- Social and Behavioral Sciences (GS): 6 credits
- Natural Sciences (GN): 9 credits

Integrative Studies (may also complete a Knowledge Domain requirement)
- Inter-Domain or Approved Linked Courses: 6 credits

6-10 of these 45 credits are included in the Requirements for the Major.
University Degree Requirements

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80). For more information, check the Suggested Academic Plan for your intended program.

Requirements for the Major

This includes 6-10 credits of General Education courses: 3-6 credits of GS courses; 3-4 credits of GQ courses.

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44.

Academic Advising

The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee’s unit of enrollment will provide each advisee with a primary academic adviser, the information need to plan the chosen program of study, and referrals to other specialized resources.

Code | Title | Credits
--- | --- | ---
PSYCH 100 | Introductory Psychology | 3
CSD 146 | Introduction to Communication Sciences and Disorders | 3
CSD 230 | Introduction to Audiology | 3
CSD 269 | Deaf Culture | 3
CSD 300 | Developmental Considerations in the Assessment and Treatment of Language Disorders | 3
CSD 341 | Acoustic Principles in Communication Sciences and Disorders | 3
CSD 311 | Clinical Phonetics | 3
CSD 331 | Anatomy and Physiology for Speech and Hearing | 3
CSD 433 | Aural Rehabilitation | 3
CSD 442 | Introduction to Disorders of Articulation and Phonology | 3
CSD 444 | Introduction to Organic Disorders of Speech and Language | 3
CSD 451 | An Introduction to Augmentative and Alternative Communication | 3
CSD 459 | Principles of Clinical Management in Communication Disorders | 3
CSD 462 | Clinical Bases of Language Disorders | 3

Additional Courses

- EDPSY 14 Learning and Instruction or PSYCH 261 Introduction to Psychology of Learning
- HDFS 129 Introduction to Human Development and Family Studies or PSYCH 212 Introduction to Developmental Psychology

Select 3-4 credits of the following:

- EDPSY 101 Analysis and Interpretation of Statistical Data in Education
- PSYCH 200 Elementary Statistics in Psychology
- STAT 200 Elementary Statistics

Select one of the following:

- HDFS 229 Infant and Child Development
- HDFS 249
- HDFS 315 Family Development
- HDFS 411 The Helping Relationship
- HDFS 418 Family Relationships
- HDFS 432 Developmental Problems in Childhood and Adolescence
- PSYCH 270 Introduction to Abnormal Psychology
- PSYCH 471 Psychology of Adjustment and Social Relationships

READ SENATE POLICY 32-00: ADVISING POLICY (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy)
University Park
Joel Waters
Academic Adviser
308H Ford Building
University Park, PA 16802
814-867-3375
jrw5090@psu.edu

Suggested Academic Plan
University Park Campus

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an Academic Requirements or What If report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
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<tr>
<td>General Education Course (GN) Human Biological²</td>
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Second Year

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<td>CSD 311†</td>
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Third Year

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<td>CSD 433*</td>
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<td>CSD 442*</td>
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<td>CSD 444*</td>
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<td>CSD 451†</td>
<td>3</td>
<td>CSD 462‡</td>
<td>3</td>
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<td>Elective⁴</td>
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US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL/CAS 137 in the fall semester and ENGL/CAS 138 in the spring semester. These courses carry the GWS designation and replace both ENGL 30 and CAS 100. Each course is 3 credits.

ASHA recommends, but does not require, GH’s such as APLNG 200, APLNG 210, CAMS 50, ENGL 228, LTNST 100, and CI 280.

ASHA (but not PSU) requires a human biological science and a physical science (physics or chemistry), so GN courses should be selected accordingly. Email Joel Waters (joelwaters@psu.edu) or Courtney Wozetek (courtney@psu.edu), CSD major advisors, with questions.

MATH 21 is strongly recommended as a GQ because it covers the type of math tested on the GRE (see Advising Notes below).

CSD recommends several electives such as (in order of preference): CSD 497/A, LING 1, LING 100, APLNG 200, APLNG 210, MATH 21, CAMS 50, CI 280, SPLED 400, INART 50, CSD 218, ENGL 30, CSD 100, RHS 100, RHS 300, ENGL 228, LTNST, LTNST 100, 127, SOC 119, any PHYS, any human biology course, any PSYCH, any HDFS.

Advising Notes
ASHA requires 25 documented shadowing hours with an ASHA-certified speech pathologist or audiologist. Accumulation of these hours can only
begin after a student has enrolled in CSD 146, and must be documented on the Observation Log found here: http://csd.hhd.psu.edu/student-advising-resources

Any student interested in becoming a speech-language pathologist or audiologist should first take the GRE (Graduate Record Examination: GRE.org) during the summer between their sophomore and junior years, and for a second time during the summer between their junior and senior years.

For CSD majors the Writing Across the Curriculum requirement is completed once the student has passed CSD 459.

CSD 100 and CSD 269 are currently the only CSD courses available online (through World Campus), offered every summer, fall and spring semester.

LIMITATIONS ON SOURCE AND TIME FOR CREDIT ACQUISITION: Per Senate policy 83-80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Most majors in Health and Human Development require students to complete up to 24 credits for the major through courses taken at University Park. Courses taken at other Penn State campuses may not be counted toward this 24 credit minimum.

Within the 30 credits of required General Education Domain courses, students must take 6 credits of Integrative Studies courses (Inter-domain or Linked courses). If you need additional clarification, consult with your academic adviser.

Commonwealth Campuses

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an Academic Requirements or What If report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

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<tr>
<td>General Education Course (GH)²</td>
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<td>General Education Course (GN)</td>
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<td>PSU First Year Seminar¹</td>
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Total Credits 16

16-16.5-18

Second Year

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<tr>
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<td>3-4</td>
<td>ENGL 202A, 202B, 202C, or 202D†</td>
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</table>

Total Credits 15

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Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

† Course requires a grade of C or better for the major
‡ Course requires a grade of C or better for General Education
# Course is an Entrance to Major requirement
†† Course satisfies General Education and degree requirement

1 First year seminar not required at some campuses.
2 CSD recommends, but does not require, GH’s such as APLNG 200, APLNG 210, CAMS 50, ENGL 228, LTNST 100, and CI 280.
3 ASHA (but not PSU) requires a human biological science and a physical science (physics or chemistry), so GN courses should be selected accordingly. Email Joel Waters (joelwaters@psu.edu) or Courtney Wozetek (courtney@psu.edu), CSD major advisors, with questions.
CSD strongly recommends several electives such as (in order of preference): CSD 497/A, LING 1, LING 100, APLNG 200, APLNG 210, MATH 21, CAMS 50, CI 280, SPLED 400, INART 50, CSD 218, CSD 318, CSD 100, RHS 100, RHS 300, ENGL 228, LTNST, LTNST 100, 127, SOC 119, any PHYS, any human biology course, any PSYCH, any HDFS.

Math 21 is strongly recommended as a GQ because it covers the type of math tested on the GRE (see Advising Notes below).

CSD recommends CSD 100.

Change-of-campus students who have had no prior CSD courses must take four of the following courses: CSD 146 AND CSD 230 AND CSD 300 AND CSD 269 or CSD 331 (if the "any human biology course" prerequisite is met) or CSD 311.

Advising Notes
ASHA requires 25 documented shadowing hours with an ASHA-certified speech pathologist or audiologist. Accumulation of these hours can only begin after a student has enrolled in CSD 146, and must be documented on the Observation Log found here: http://csd.hhd.psu.edu/student-advising-resources

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Within the 30 credits of required General Education Domain courses, students must take 6 credits of Integrative Studies courses (Inter-domain or Linked courses). If you need additional clarification, consult with your academic adviser.

Career Paths
Students who complete an advanced degree in speech-language pathology evaluate, diagnose and provide treatment for people of all ages who have communication disabilities and differences. Speech-language pathologists with master’s degrees work in hospital and rehabilitation centers, schools, community clinics, nursing homes, and private practice. Audiology students who complete a clinical doctorate of audiology degree (AuD) evaluate, diagnose and treat people of all ages with hearing loss. Speech-language pathologists and audiologists who earn doctorate (PhD) degrees typically teach and conduct research in a university setting.

MORE INFORMATION ABOUT CAREERS (http://csd.hhd.psu.edu/undergrad/ugrad_detail.html)