

CS (BS) Technical Track Form

Academic Year 2020-2021

Student Information			
Last Name		First Name	
GWID		GW Email	@gwmail.gwu.edu
SEAS Major	Computer Science	Degree	B.S.

As a student in the BS program, you must complete a technical track consisting of four courses (a minimum of 12 credits) as part of your degree requirements. You need to have your selections approved by your advisor (their signature is required below). A minimum of two of the four courses must be from the list on Page 2. All four must have CSCI 2113 as a prerequisite or within the prerequisite chain. For more information about technical track options and special rules, visit: <https://www.cs.seas.gwu.edu/bachelor-science-technical-track-requirement-academic-years-2019-20-through-2021-22>

Technical Track Electives in Core Areas							
The two Core Area courses taken from the list on Page 2							
#	Subject	Course No.	Course Title	Credit Hrs	Course In Progress	Course Completed	Future Course
1							
2							

Other Technical Track Electives							
Must have CSCI 2113 as a prerequisite or in the prerequisite chain. May be from the list on Page 2, if desired.							
#	Subject	Course No.	Course Title	Credit Hrs	Course In Progress	Course Completed	Future Course
3							
4							

Read before signing: *I have reviewed the requirements and I understand what I must do to complete these requirements. Any revisions must be approved in writing.*

Required Signatures				
Student Signature		Date		
SEAS Faculty Advisor Signature		Last Name		Date
CS Undergraduate Program Director Signature		Last Name		Date

For Advising Office Use Only

Submit forms to:
SEAS Undergraduate Student Services and Advising
seasadvising@gwu.edu

Bachelor of Science Technical Track Requirement Academic Years 2019-20 through 2021-22

All students in the BS in computer science program (Academic Years 2019-20 through 2021-22) are required to take four technical courses (for a minimum of 12 credits) of computer science coursework for their technical track. Two of the four courses must be selected from the following list. We recommend that they both be taken from within the same subject area, but this is not necessary. The courses not from this list, generally, must have CSCI 2113 as a prerequisite or within their prerequisite chain. The faculty advisor's documented approval is required before these latter two courses may be applied towards degree completion. Note that there is no requirement that all four courses be from the same general subject area.

Systems	<ul style="list-style-type: none"> • CSCI 6411 - Advanced Operating Systems • CSCI 6421 - Distributed Systems • CSCI 4431 or 6431 - Computer Networks
Theory	<ul style="list-style-type: none"> • CSCI 4331 or 6331 - Cryptography • CSCI 4364 or 6364 - Machine Learning • CSCI 8331 Advanced Cryptography (and the 3907 version)
AI	<ul style="list-style-type: none"> • CSCI 3907 Neural Networks Networks to be renamed CSCI 4366 Neural Networks and Deep Learning • CSCI 3907 Big Data & Analytics • CSCI 4364 or 6364 - Machine Learning • CSCI 4341 - Continuous Algorithms • CSCI 4527 or 6527 - Introduction to Computer Vision
Applications	<ul style="list-style-type: none"> • CSCI 6351 - Data Compression • EMSE 6575 - Applied Machine Learning for Analytics • CSCI 4554 - Computer Graphics • CSCI 4237 - Software Design for Handheld Devices
Security	<ul style="list-style-type: none"> • CSCI 3907 Usable Security and Privacy to be renumbered CSCI 4533 Usable Security and Privacy • CSCI 4331 or 6331 - Cryptography • CSCI 8331 Advanced Cryptography (and the 3907 version)

<https://www.cs.seas.gwu.edu/bachelor-science-technical-track-requirement-academic-years-2019-20-through-2021-22>

CS (BS) Non-Technical Elective Declaration Form

Academic Year 2020-2021

Student Information			
Last Name		First Name	
GWID		GW Email	@gwmail.gwu.edu
SEAS Major	Computer Science	Degree	B.S.

Each course listed on this form should be of 3 or more credits. A 6-credit course may be used across two slots if it qualifies for the slots, but credits may not be combined in any other manner.

Humanities and Social Science Electives					
#	Requirement	Subject	Course No.	Course Title	Credit Hrs
1	Humanities General Education Elective *				
2	Social Science General Education Elective *				
3	Social Science General Education Elective *				
4	Approved course from SEAS Humanities, Social Science or Non-Technical List**				
5	Approved course from SEAS Humanities, Social Science or Non-Technical List**				
6	Approved course from SEAS Humanities, Social Science or Non-Technical List**				
* University general education classes listed here: http://bulletin.gwu.edu/university-regulations/general-education/ ** SEAS Approved electives from Humanities, Social Science, or Non-Technical list is attached on Page 3.					

As a student in the BS program, you must complete a non-technical track as part of your degree requirements. You need to declare your choice of topic area and have your selections approved by your advisor by signing this form. For more information and about track options and special rules, visit: <https://www.cs.seas.gwu.edu/bachelor-science-curriculum-academic-years-2019-20-through-2021-22>.

Non-Technical Track Area:				
#	Subject	Course No.	Course Title	Credit Hrs
1				
2				
3				

Additionally, you must choose your Statistics and Linear Algebra electives and four (4) unrestricted/selected electives that must be approved by your faculty advisor. For more information about these electives visit: <https://www.cs.seas.gwu.edu/bachelor-science-curriculum-academic-years-2019-20-through-2021-22>.

Statistics and Linear Algebra Electives				
#	Subject	Course No.	Course Title	Credit Hrs
1				
2				

Unrestricted/Selected Electives				
#	Subject	Course No.	Course Title	Credit Hrs
1				
2				
3				
4				
<p>NOTE: Please review all information in the University Bulletin and get approval from your faculty advisor before selecting unrestricted electives: http://bulletin.gwu.edu/archives/2019-2020/engineering-applied-science/computer-science/bs/#requirements</p>				

Read before signing: I have reviewed the requirements and I understand what I must do to complete these requirements. Any revisions must be approved in writing.

Required Signatures					
Student Signature				Date	
SEAS Faculty Advisor Signature		Last Name		Date	
CS Undergraduate Program Director Signature		Last Name		Date	

For Advising Office Use Only

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SEAS Undergraduate Student Services and Advising
seasadvising@gwu.edu

SEAS Approved Humanities, Social Science, and Non-Technical Course List and University General Education for Humanities and Social Science List AY: 2020-2021

List of SEAS Approved Humanities, Social Science, and Non-Technical Course

The list below is universal to all majors within the School of Engineering and Applied Science at GW and should only be used to satisfy the SEAS Humanities and Social Science requirement, *not the University General Education requirement.*

HUMANITIES

American Studies: AMST 1050, 1160, 1200, 2010, 2011, 2020/2020W, 2120W (AMST 2120W is equivalent to PSC 2120W), 2210, 2320, 2350, 2380, 2410, 2440, 2520, 2521, 2530, 2710, 2730/2730W, 2750W, 3352/3352W
Anthropology: ANTH 2750/2750W
Art History: All AH Courses
Classical and Near Eastern Languages and Civilizations: All ARAB, CLAS, GREK, LATN, HEBR, PERS, TURK and YDSH courses (except 2104)
East Asian Languages and Literature: All CHIN, KOR, JAPN courses, and EALL 3811, 3814/3814W, 3821, 3831, 3832
English: All ENGL courses (excluding expository or creative writing which includes but not limited to ENGL 1099, 1210, 2210, 3210, 3380, 3390, 4220, and 4220W)
History: All HIST courses
Honors: HONR 1016 (or HONR 2016), 2053/2053W, HONR 2054
Media and Public Affairs: SMPA 2110W, 3230, 3236W, 3241W, 3243W, 3245, 3246
Music Theory, History, and Literature: MUS 1103, 1104, 1107, 1108, 2101, 2102, 2109, 2110, 2111, 2121
Naval Science: NSC 2126, NSC 2180
Peace Studies: PSTD 1010
Philosophy: All Courses except PHIL 2045, 3121 (NOTE: Student may take NSC 4176 in lieu of PHIL 2135)
Political Science: PSC 2120W
Romance, German, and Slavic Languages and Literature: All SPAN, ITAL, FREN, PORT, GER, and SLAV courses
Religion: All REL courses
Speech, Language, and Hearing Sciences (previously SPHR): SLHS 1072, 1081, 1082
Theatre and Dance: TRDA 1015, 1020, 1025, 3245, 3246, 2191
Women's, Gender, and Sexuality Studies: WGSS 2380, 3352, 3353, 3981
Women's Leadership Program: WLP 1020

SEAS students required by GW Admissions to take EAP 1015 can apply this course to the Humanities requirement.

SOCIAL SCIENCES

American Studies: AMST 2490, 2532, 3324, 3350
Anthropology: ANTH 1002/1002W, 1003, 1004, 2008/2008W, 2502, 2506, 3501-3509, 3513, 3522, 3601-3603, 3701-3705, 3707-3709, 3801-3804, 3806, 3813, 3814, 3838/3838W
Communication: COMM 1025, 1040, 1041
Economics: All Courses except ECON 1001, 2160, and 3123
Geography: GEOG 1001, 1002, 1003, 2110, 2127, 2133, 2134, 2141, 2144, 2145, 2146, 3120 (equivalent to 2120) 3143, 3154, 3161, 3164
Health Sciences: HSCI 2101, 2103
Health and Wellness: HLWL 1109
Honors: HONR 2043, 2044, 2047/2047W, 2048
Human Services: HMSR 2171, 2172, 2177
International Affairs: IAFF 2090-2093
Mechanical Engineering: MAE 2170
Media and Public Affairs: SMPA 1050, 2101, 2102, 2173, 2177, 3428, 3470, 3471, 3472, 3474, 3476
Naval Science: NSC 1051, 2160, 2175
Political Science: All PSC courses
Psychology: All PSYC Courses (except PSYC 2120W)
Sociology: All SOC courses
Speech, Language, and Hearing Sciences (previously SPHR): SLHS 1071/1071W, 1084
Sustainability: SUST 1001
Tourism Studies: TSTD 3001
Women's, Gender, and Sexuality Studies: WGSS 1020, 2120, 2125

List of University General Education for Humanities and Social Science

The list below is the humanities and social science portion of the University General Education requirement. For the most updated list please check the bulletin:

<http://bulletin.gwu.edu/university-regulations/general-education/>

CRITICAL OR CREATIVE ANALYSIS IN THE HUMANITIES

American Studies: AMST 1000.10, 1160, 1200, 2010, 2011, 2020/2020W, 2120W, 2210, 2320, 2350, 2380, 2385/2385W, 2410, 2430, 2440/2440W, 2600, 2610/2610W, 2620, 2630, 2710, 2730/2730W, 2750W, 3352/3352W, 3361, 3600
Anthropology: ANTH 2750/2750W
Corcoran Art History: CAH 2113, 2114
Chinese: CHIN 3116, 3123, 3124, 3163
Classical Studies: CLAS 1001, 2107
East Asian Languages and Literature: EALL 3811, 3814/3814W
English: ENGL 1000, 1050, 1300, 1315, 1320/1320W, 1330/1330W, 1340/1340W, 1351, 1360, 1365, 2100, 2410/2410W, 2411/2411W, 2510/2510W, 2511/2511W, 2610/2610W, 2611/2611W, 2710/2710W, 2711/2711W, 2712, 3400, 3446, 3621, 3730/3730W, 3910, 3918
French: FREN 2006, 2500, 3500, 3700, 4540
German: GER 1000, 2091, 2092, 2161, 2162, 3182, 3187
Greek: GREK 1001
GW Teach: GTCH 3103
Hebrew: HEBR 1001
History: HIST 1011, 1020, 1110, 1120/1120W, 1121, 1310, 1311, 2010, 2011, 2020/2020W, 2050, 2060, 2061, 2113, 2124, 2125, 2131, 2141, 2160, 2312, 2313, 2320, 2321, 2322, 2350, 2380, 2410/2410W, 2440/2440W, 2520, 2610/2610W, 2630, 2710, 2730/2730W, 2811, 2850, 3044W, 3313, 3352/3352W, 3353, 3360, 3361, 3611, 3811/3811W
Honors: HONR 1016, 2053/2053W
Italian: ITAL 4100, 4184, 4380
Japanese: JAPN 3111, 3112
Judaic Studies: JSTD 2060
Korean: KOR 3111, 3112, 3123, 3124
Latin: LATN 2001, 3001/3001W, 3002/3002W
Philosophy: PHIL 1051, 1153, 2124/2124W, 2125/2125W, 2131, 2132/2132W, 2133, 2134, 2136, 2140, 2281, 3142/3142W, 3151, 3153
Political Science: PSC 2120W
Peace Studies: PSTD 1010
Religions: REL 1000, 1010/1010W, 2165, 2169, 2201, 2301, 2314, 2401, 2501, 2562, 2811, 2814, 2981, 3149/3149W, 3151/3151W, 3161/3161W, 3401, 3405, 3614, 3923
Slavic Languages and Literature: SLAV 1017, 2310, 2320
Spanish: SPAN 1095, 2005, 2006, 2026, 2056, 2156, 3100/3100W, 3200
University Courses: UNIV 1006
Women's, Gender, and Sexuality Studies: WGSS 1000, 1020, 2225, 2380, 2385/2385W, 2710, 3352/3352W, 3353, 3981
Women's Leadership Program: WLP 1020

CRITICAL OR CREATIVE ANALYSIS IN THE SOCIAL SCIENCES

Anthropology: ANTH 1000, 1002/1002W, 1003, 1004, 2008/2008W, 2502, 3704, 3838/3838W
Communications: COMM 1025, 1040, 1041
Economics: ECON 1011, 1012
Geography: GEOG 1001, 1003
Honors: HONR 2043, 2044, 2047/2047W
Media and Public Affairs: SMPA 1000, 1050, 2101, 2102
Organizational Sciences: ORSC 2000
Political Science: PSC 1001/1001W, 1002/1002W, 1011, 1012W
Psychology: PSYC 2011/2011W, 2012, 2013, 2014, 2015
Sociology: SOC 1002, 1003, 2104/2104W, 2169
Speech, Language, and Hearing Sciences (previously SPHR): SLHS 1071/1071W, 1072, 1084
Sustainability: SUST 1001
University Courses: UNIV 1005

NOTE: PSYC 1001 is required for all Psychology courses.