

YESHIVA UNIVERSITY

YU GLOBAL

**MASTER OF SCIENCE in
SOFTWARE DEVELOPMENT**

**ACADEMIC CATALOG
2025-2026**

**YU Global
2495 Amsterdam Avenue
New York, New York 10033
<https://global.yu.edu>**

TABLE OF CONTENTS

ABOUT THIS CATALOG

WELCOME TO YU GLOBAL: A Message from the YU Global Vice President

TABLE OF CONTENTS

YESHIVA UNIVERSITY POLICIES

- Equal Opportunity
- Accreditation
- Safety and Security
- Non-Discrimination and Harassment
- Accommodations for Students with Disabilities
- Student Conduct and Student Rights
- Privacy
- Use of University's Name

PROGRAM ACADEMIC POLICIES, STANDARDS AND EXPECTATIONS

- Program Code and Academic Calendar
 - Attendance
 - Time Limitations
 - Course Load
 - Grades
 - Appeal of Final Grade
 - Transfer of Credit and Waiver/Substitutions of a Required Course
 - Registration
 - Continuous Status
 - Cross-Campus Registration / Course Auditing / Independent Study / Directed Study
 - Withdrawal from a Course
 - Eligibility for Graduation
 - Diplomas
 - Records and Transcripts
 - Change of Name or Address

SATISFACTORY PROGRESS STANDARDS

- Good Academic Standing
- Academic Probation and Dismissal

CHANGE OF STATUS, LEAVES AND DISMISSAL

- Leave of Absence
- Official Withdrawal
- Procedures for Removal
- Reapplication after Withdrawing from the University

CODE OF ETHICS

- Academic Integrity
- Cheating on Assignments and/or Exams
- Plagiarism
- Penalties and Procedures for Violating Academic Integrity Standards
- Notification On Process
- Initial Review
- Hearing
- Decision
- Appeal
- Records
- Reapplication after Dismissal
- Other Violations of Academic Integrity

SOCIAL MEDIA USE

- YU Student Technology Resources Use Handbook

GRIEVANCES

- Grievance Procedure

HEALTH REQUIREMENTS

- Immunization Forms/Covid Policy

STUDENT LIFE AND RESOURCES

- Student Services
- Academic Advisement
- Canvas
- Career Center
- Counseling Center
- Disability Services
- Graduate Assistantships
- Health Services
- Library Services
- New Student Orientation
- Office of International Students and Scholars
- Office of Student Finance
- OneCard
- Parking for Student and Alumni

PROGRAM DESCRIPTION

- Learning Goals and Objectives

ADMISSIONS REQUIREMENTS

DEGREE REQUIREMENTS

CURRICULUM: COURSE DESCRIPTIONS

ABOUT THIS CATALOG

Unless otherwise stated in this document, this catalog supersedes all previous catalogs and academic information and policies and is binding on all YU Global graduate students at Yeshiva University, effective at the time they enroll. It was prepared based on the best information available at the time of publication. The University reserves the right to change tuition, fees, course offerings, regulations, policies, and admission and graduation requirements at any time without prior notice. However, students may continue a course of study in effect at the time they enrolled provided that they complete the program within the specified time period.

This catalog, posted on the YU website, is the official catalog. Printed versions are copies of the catalog. If there are corrections or changes, they will be published on the YU website.

WELCOME TO YU GLOBAL: A Message from

the YU Global Vice President

Dear Student of the Master of Science in Software Development Program,

I welcome you to Yeshiva University and to YU Global! Congratulations on being accepted into our Master of Science in Software Development program. We are thrilled to have you join our community of scholars and learners who are committed to academic excellence, intellectual growth, and professional development.

As you embark on this new journey, you will find that our program is designed to provide you with the knowledge, skills, and experiences necessary to excel in the software development industry. The innovative and immersive academic experience you are about to begin is one that will give you the skills to prepare for the rigor and demand of today's technological environment. Our faculty mentors are dedicated professionals who are eager to support your academic and personal growth. They bring a wealth of knowledge and real-world experience to the classroom, ensuring that your education is both rigorous and relevant.

Throughout your time here, you will have access to a variety of resources and opportunities, including individualized academic mentorship to follow your progress through the program and intensive preparation for your unique job search and placement journey. We encourage you to take full advantage of these offerings to enhance your learning experience.

We also value the importance of community and collaboration. In this program, you will have the daily opportunity to connect with fellow students, engage in meaningful discussions with mentors, and participate research projects designed to teach you software development.

Please do not hesitate to reach out to us if you have any questions or need assistance. Our doors are always open, and we are here to support you every step of the way.

We look forward to seeing you achieve great academic and professional milestones and to your contributions to the vibrant intellectual community that makes YU Global an exceptional place to be.

Danielle Wozniak, MSW, PhD
Vice President for Global Strategy and Business Development
YU Global
Yeshiva University
<https://global.yu.edu/>

YESHIVA UNIVERSITY

Yeshiva University is the world's premier Jewish institution for higher education. Rooted in Jewish thought and tradition, it sits at the educational, spiritual and intellectual epicenter of a robust global movement that is dedicated to advancing the moral and material betterment of the Jewish community and broader society, in the service of God.

In September 2017, Ari Berman was inaugurated as the fifth president of Yeshiva University. He succeeded Richard M. Joel, who was inaugurated in 2003, and Norman Lamm, who had held the office since 1976. President Berman's two other predecessors were Bernard Revel, president from 1915 to 1940, and Samuel Belkin, who served from 1943 to 1975.

Visit <https://www.yu.edu> for more information about Yeshiva University.

UNIVERSITY POLICIES

Equal Opportunity

Yeshiva University has a long-standing commitment to equal opportunity and affirmative action. We apply every good faith effort in achieving nondiscrimination and equality of opportunity in employment and in all spheres of academic life. All University-wide decisions regarding faculty, staff and students are based on equitable and equally applied standards of excellence.

Unlawful harassment procedures have been established, both as a legal obligation under applicable law and as a visible and formal expression of institutional policy. The University's policy is designed to insure that recruitment, hiring, training, promotion, and all other personnel actions take place, and all programs involving students, both academic and nonacademic, are administered without regard to race, religion, color, creed, age, national origin or ancestry, sex, marital status, physical or mental disability, veteran or disabled veteran status, genetic predisposition/carrier status, sexual orientation, gender identity and expression, citizenship status, sexual and other reproductive health decisions, or any other characteristic protected by any applicable law, ordinance or regulation. In addition, University policy is designed to maintain a work and academic environment free of harassment and intimidation.

Accreditation

Yeshiva University is accredited by the Middle States Commission on Higher Education and by the appropriate professional agencies: the American Psychological Association, the American Bar Association, the Commission on Accreditation of the Council on Social Work Education, the Association of Institutions of Higher Learning for Jewish Education, and the National Board of License for Hebrew Teachers. The Master of Science program in Speech-Language Pathology is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language- Hearing Association. The Occupational Therapy Doctorate program has been granted pre-accreditation status by the Accreditation Council for Occupational Therapy (ACOTE) of the American Occupational Therapy Association (AOTA). The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Provisional status to the Physician Assistant Program.

Safety and Security

Yeshiva University takes its responsibility for on-campus security very seriously and makes every effort to offer its students, faculty and staff a safe and comfortable environment by working closely with the local community and with law enforcement

agencies.

Notice of Access to Campus Crime Statistics, the Campus Security Report, and Information on Registered Sex Offenders

The University's Advisory Committee on Campus Safety will provide, upon request, all campus crime statistics as reported to the U.S. Department of Education. The U.S. Department of Education maintains campus crime statistics information on its website at <https://ope.ed.gov/campussafety/#/>. In addition, the University's annual security reports, which includes all campus crime statistics, and the University's annual fire safety reports are available on the University's website at <https://www.yu.edu/safety-security/policies-procedures-reports> or may be obtained from the University's Chief of Security, Paul Murtha (212-960-5221/security@yu.edu). The annual security report for each campus includes: (i) campus crime statistics for the most recent calendar year and the two preceding calendar years; (ii) campus policies regarding procedures and facilities to report criminal actions or other emergencies on campus; (iii) policies concerning the security of and access to campus facilities; (iv) policies on campus law enforcement; (v) a description of campus programs to inform students and employees about campus security procedures and practices and to encourage students and employees to be responsible for their own security and the security of others; (vi) campus crime prevention programs; (vii) policies on illegal drugs and alcohol; (viii) where information provided by the State on registered sex offenders may be obtained; and (ix) policies on campus sexual assault programs aimed at the prevention of sex offenses and procedures to be followed when a sex offense occurs. While we hope that emergency events on campus are unlikely, it is vital to be prepared to react appropriately during emergencies to ensure your safety. To get prepared and learn about emergency response at Yeshiva University, visit our Emergency Readiness website: <https://www.yu.edu/safety-security/emergency>.

Non-Discrimination and Harassment

Yeshiva University complies with all federal, state and local regulations governing Non-Discrimination and Harassment including Title VII of the Civil Rights Act of 1964 and Title IX of the Education Amendments Act of 1972. In keeping with its long-standing traditions and policies, Yeshiva University provides equal opportunity for faculty, staff and students within admissions and employment, and those seeking access to programs based on individual merit. University-wide policies and procedures pertaining to discrimination and harassment have been established, both as a legal obligation under applicable law and as a visible and formal expression of institutional policy. The University's Nondiscrimination and Anti-Harassment Policy and Complaint Procedures can be found online at <https://www.yu.edu/student-life/resources-and-services/policies>. This policy includes information about filing a report, seeking a response and options for confidential disclosure. The University will respond to all complaints promptly, thoroughly, and impartially.

Retaliation is prohibited against anyone who filed and/or participated in the investigation of a

complaint, even if the complaint is substantiated. When warranted, the University will take appropriate, corrective action to remedy all violations of this policy, up to and including termination and/or expulsion. Administrative and investigative responsibility relating to enforcement of the policy has been assigned to the University's Title IX Coordinator, Dr. Chaim Nissel, at (646) 592-4201.

Accommodations for Students with Disabilities

The Office of Disability Services assists students with documented disabilities or medical conditions in obtaining reasonable accommodations. Some of the disabilities accommodated include physical, emotional or learning disabilities, ADHD, hearing impairments, and visual impairments. Visit the following website for more information about documentation guidelines and available accommodations:

<https://www.yu.edu/student-life/resources-and-services/disability-services/students>

Students who wish to request accommodations for a documented disability that affects his/her academic performance and students who suspect that they may have a disability are encouraged to contact the YU Global Degree Pathway Coordinator Kristine Southard, Ph.D. at kristine.southard@yu.edu.

Student Conduct and Student Rights

Please visit

<https://www.yu.edu/student-life/resources-and-services/Standards-Policies>

The University policies on student conduct and student rights, include:

- Behavior Policy for Athletics
- An7-Bullying and Hazing Policy for Students
- Credit Card Marking Policy
- Drug and Alcohol Policy
- Medical Form
- Requirements for Working with Minors
- Romantic Relationships Policy
- Sexual Assault Student Bill of Rights
- Title IX (Non-Discrimination and Anti-Harassment Policy)
- YU Student IT Handbook

Additional student consumer information can be found at:

<https://www.yu.edu/oir/student-consumer-information>.

Privacy

In accordance with the provisions of the Family Educational Rights and Privacy Act of

1974, as amended (Section 438 of the General Education Provisions Act, 20 USC 1232g), also known as “FERPA,” Yeshiva University has adopted certain policies to protect the privacy rights of its students with respect to their education records. FERPA affords students certain rights of access to their education records. FERPA also limits the persons to whom the University may disclose a student’s education records and permits certain disclosure without the student’s written permission. Please visit the Office of the Registrar or its website at <https://www.yu.edu/registrar/parents> to obtain the Yeshiva University FERPA Policy Statement.

Use of the University’s Name

No student or student organization may use the name of the University or any of its components in print or digital/electronic media for any purpose, including identification, without written permission from the Office of the Vice President.

PROGRAM ACADEMIC POLICIES: STANDARDS AND EXPECTATIONS

Program Code

This program is registered by the New York State Education Department.

HEGIS Code	CIP Code	Title	Degree
0701.00	11.0201	Software Development	Master of Science

Academic Calendar

Yeshiva University operates on the semester system. The academic year consists of three semesters: two 15-week semesters (fall and spring) and one 10-15-week semester (summer); the semester length includes examinations and/or final projects. The fall term runs from late August or early September to the end of December; the spring term runs from late January to late May. The summer term runs from late May to mid-August. Classes may meet Sunday through Friday. The Academic Calendars for Fall, Spring and Summer can be found online at <https://www.yu.edu/registrar/grad-calendar/>.

Students in the Master's in Software Development program follow a sequential credit schedule below:

ONE CREDIT WEEKLY SCHEDULE:

CONTACT/INSTRUCTIONAL OPEN LAB HOURS (CONTACT WITH INSTRUCTOR AND TECHNICAL LAB TEAM FACILITATORS):

M-TH: 8:30am-1130am 3 hours
Lunch: .5 hours
12:00-12:30pm .5 hours
F 8:30am-9:30am 1 hour

WEEKLY INSTRUCTIONAL HOURS TOTAL: 15 HOURS

OUTSIDE/LAB HOURS: OPEN LAB (LED BY MENTORS known as TECHNICAL LAB TEAM FACILITATORS):

M-TH	1230pm-6pm	5.5 hours
F	930am-5pm	7.5 hours

OUTSIDE/LAB WORK HOURS TOTAL: 30 HOURS

Attendance

The Master of Science in Software Development is delivered as a sequential curriculum. Students accrue credits as they complete each week and course of the term. Therefore, whether the student is registered for the face-to-face or in synchronous online program delivery, students are expected to attend all scheduled classes in their entirety. Students who fail to fulfill this requirement will receive an academic penalty appropriate for the course work missed. Missing classes will jeopardize the student's ability to continue to accrue credits and progress through the term.

Due to the sequential curriculum of the program, if a student fails to meet the requirements of a course, they may not continue forward to complete the rest of the courses in the semester. Students who fail to progress through the sequence of courses will be required to withdraw from the term and will be required to re-apply in the next cohort cycle.

If the student is absent because of a disability which is documented by the Office of Disability Services at Yeshiva, falls ill or there are other extenuating circumstances, the student must inform the instructor immediately. The instructor may require appropriate documentation to make any exception to this policy. Students will be responsible for working with the faculty advisor to determine practical methods to make up for missed work.

Time Limitations

A student must complete the requirements for the master's within two years of the first semester the student enrolled in the program. Students who go beyond this limit will need permission from their Program Director to continue their studies at YU Global. If permitted to continue, these students may be required to take additional,

more current, coursework.

Course Load

Students are required to register for each term of the Master's in Software Development program in a **full-time status only**.

Grades

Students may access their grades at:

<https://www.yu.edu/registrar/registration>

To view grades:

1. Log in with your Banner ID
2. Click on "Student and Financial Aid"
3. Click on "Student Records"
4. Click on "Final Grades" and select the appropriate term

Pass/Fail Grading: Students in this program will be graded as pass/fail for all courses based on the following quality of work:

Pass: 70%-100%

Fail: 69% -0%

Each course has outlined grading criteria for students to follow; there is no GPA.

I (incomplete) Grade: Due to the sequential curriculum of the program, students may not request an incomplete grade. If a student is unable to complete a course in sequence, he/she will be required to withdraw from the term.

Appeal of Final Grade

If a student believes a grade is incorrect, he/she must first meet with the instructor. If the instructor chooses to change the grade, they will complete a Change of Final Grade form and send to the Vice President of YU Global for approval. The form will then be sent to the Office of the Registrar. The instructor has final say on all grade changes except in extraordinary circumstances. All grade changes must be approved by the YU Global Vice President, or her designee, and the Program Director.

Transfer or Credit or Waiver/Substitution of a Required Course

Not applicable.

Registration

Students will register for each term in its entirety at the commencement of the term. Before their first semester, incoming graduate students will be provided with instructions by the YU on how to register for their courses. Continuing students will register online through YU Portal (<https://insidetrack.yu.edu>). Continuing students are expected to register each semester during the specific registration period; registration dates will be published in the Academic Calendar. Students who register outside of the designated registration period may be subject to late registration fees.

Continuous Status

Students are expected to register for each term until completion of the program. Students must maintain continuous registration with the program until graduation. Any student who neither registers nor secures an official leave of absence for any semester will be considered withdrawn from the program.

Cross-Campus Registration/ Course Auditing/ Independent Study/ Directed Study
Not applicable.

Withdrawal from a Course/ Withdrawal from the Program

Students who withdraw from a class are required to withdraw from the semester due to the sequential curriculum. Students may drop classes through Inside Track from the start of the designated registration period until the “last day to drop a course” as listed on the Academic Calendar. Students will be required to fill out an Add/Drop Form found on the Registrar’s website. The course is listed on the permanent record with a grade of “W”. Students should be aware of the refund dates for each semester. Students may not receive a full refund for courses dropped even if they are dropped before the “last day to drop a course without a W”. See the “Grades” section for more information about Withdrawal.

The typical Fall/Spring/Summer tuition refund schedule is listed below. Please note that registration and other fees will not be refunded.

COURSE WITHDRAWN	PERCENT OF TUITION
BY: Prior to Semester Start	REFUNDED: 100%
End of the 1 st week of the semester	75%
End of the 2 nd week of semester	50%

End the 3 rd week of semester	25%
--	-----

The day after the end of the 3rd week of the semester is the last day students can withdraw without a W and will not receive a refund.

Please see the Office of Student Finance website for more details about the tuition refund schedule and fees: <https://www.yu.edu/osf/contact>

Eligibility for Graduation

To be eligible for a degree, students must complete all required coursework with a passing grade and other requirements for the specific program as published in the Academic Catalog for the semester in which the student first enrolled. Students who fail to complete all requirements before the date of degree conferral will need to re-apply for the next possible degree date. Degrees are conferred in September, January, and May each year. A student applies for a degree by filing an Application for Graduation Form in the Office of the Registrar. Students will not be eligible to receive a degree unless they have submitted the Application for Graduation Form by the appropriate deadline as published in the Academic Calendar. Should the degree not be awarded on that degree date, a new application must be filed prior to the degree date deadlines thereafter until the degree is awarded. Graduation fees paid initially remain valid for two (2) years and need not be paid again unless more than two (2) years elapses between payment and award of degree.

Students are bound by the curriculum that was in effect during the first semester they enrolled in the program. Students are responsible for meeting regularly with their academic advisors and checking their unofficial transcripts to ensure they are on track to graduate.

Diplomas

Diplomas will be mailed to the address students list on the Application for Graduation Form within eight (8) weeks of the degree date. The last name on the student's diploma must match the last name on the student's record at YU. Duplicate or revised diplomas can be secured under certain circumstances. The acceptable reasons for a duplicate diploma request are listed here:

<https://www.yu.edu/sites/default/files/legacy/uploadedFiles/Academics/Registrar/Forms/YC/Duplicate%20Diploma%20Request%20Form.pdf>. More information is available on the Office of the Registrar website at www.yu.edu/registrar.

Records and Transcripts

Students may generate unofficial transcripts at no cost in the Office of the Registrar or online at <https://www.yu.edu/registrar/registration>. Current or former students who want official transcripts should visit www.yu.edu/transcript, where they can find information about fees, regulations, and procedures governing the issuance of official transcripts.

A student's official records are sent only in the form of a complete transcript. No partial records are sent. Transcripts list courses in progress without grades. Students who believe there is an error in their academic record (e.g., in a grade, average, credit value, or course) must promptly contact the Office of the Registrar.

Change of Name or Address

A student who wishes to change either a first or last name on YU records must file a Request for Change of Name on YU Records Form in the Office of the Registrar. Students who change their home or local residences are required to notify the Office of the Registrar within 10 days by updating their addresses and phone numbers online. A student is responsible for all mail sent to the old address if his/her address has not been updated.

SATISFACTORY PROGRESS POLICIES

Good Academic Standing

Due to the sequential curriculum of the program, students must pass each course to continue to the next course throughout the term to maintain satisfactory progress toward a degree. Students who fail a course in the sequence will be dismissed from the program.

Changes of Status

YU Global requires the student to be continuously enrolled each semester as a fulltime student, as required by the student's program until their degree is granted. To maintain continuous enrollment, students must register for full time status each semester or take a leave absence.

Leave of Absence

Students who are not registered for academic credits or courses but who expect to return to the university should file for a Leave of Absence. The leave of absence must be approved by the Vice President. The student must fill out and submit a Leave of Absence form to the Office of the Registrar prior to the start of classes for the given semester. Students may apply for a leave of absence for a maximum of 180 days. Students are only eligible for a leave of absence after the completion of one (1) semester of coursework. If the need for a leave of absence extends beyond 180 days

– taken together or separately – the student must officially withdraw from the program. Students who wish to withdraw must submit the Application for Withdrawal, available in the Office of the Registrar. The form must be signed by the Vice President.

Please Note: Immigration regulations require that students in F-1 status register and attend YU full-time every semester. Please contact the Office of International Students and Scholars (OISS) **before** dropping below full-time or if you are considering a leave of absence.

Official Withdrawal

If a student chooses to withdraw from the program, they must fill out the Official Withdrawal Form and submit it to the Registrar's Office. Students registered for courses at the time of withdrawal will be subject to refund amounts as outlined in the academic calendar. Based on the timing of the student's withdrawal, the student may receive a **W** on their transcript. The YU's academic calendar may be referenced for specific dates.

Students who are registered for courses at the time of their withdrawal will be subject to the tuition refund rates in effect on the date of their withdrawal. Before the student withdraws from a program, the student must contact the Office of Student Finance regarding deadlines for tuition reimbursement and to address related financial responsibilities.

Procedures for Removal

When it comes to the attention of any member of the University community that a student may pose a threat to the health and safety of themselves and/or others, he/she should immediately take reasonable steps to notify his/her supervisor, the applicable Program Director and/or the Vice President of YU Global. (If so notified, the supervisor and Vice President should in turn notify the applicable Program Director.) The Program Coordinator or Vice President of YU Global then should take immediate action to assess the nature and magnitude of the threat to the student and to others, which may involve consultation with others including counseling and other relevant support services. In accordance with applicable law and regulations, procedures should be followed to ensure that a student considered for involuntary leave is not subject to an adverse action based on unfounded fears, prejudice, or stereotypes. A psychological, psychiatric, or medical evaluation by a healthcare provider may be necessary to determine if an involuntary leave of absence is necessary or appropriate. The student may be asked to provide relevant psychological or medical records from his/her healthcare provider.

To the extent practicable, a student whose involuntary leave is under consideration

will be informed in person, if practical, or in writing, and will be provided with an opportunity to be heard in an interview with the appropriate counseling staff and/or administrative official prior to any such decision. A student who is placed on involuntary leave may appeal the decision to the Program Director within 10 business days of the decision. The appeal should be in writing and set forth the basis for the appeal. The Vice President or his/her designee will review the appeal, and his/her decision will be considered final.

In cases of a safety emergency, a student may be removed from the University campus. To the extent practicable, the student will be provided with notice and an opportunity to be heard in an interview with the appropriate counseling staff and/or administrative official prior to any such decision. The student also may appeal the decision as set forth in the preceding paragraph. The University reserves the right to make appropriate arrangements regarding the health and safety of the student.

A student placed on involuntary leave must remain off campus and off-line for the duration of their leave. A student on involuntary leave may not visit the campus or any other facility owned by the University without written approval from a University official. YU Global will notify all relevant parties of the leave of absence and/or removal from campus.

A student's continuance on the rolls of the University; the receipt of academic credits, honors, and awards; graduation; and the conferring of any degree, diploma, or certificate upon a student are entirely subject to the disciplinary powers of the University and to the student maintaining high standards of ethical and academic conduct. A student's academic standings may be changed to "on probation" or the student may be dismissed at the discretion of the Vice President at any time for infringement of these standards.

[Readmission after Withdrawing from the University](#)

A student who neither registers nor secures an official leave of absence for any semester will be considered to have withdrawn from the Program. A student who wishes to resume studies may apply again to the program. Students who withdrew (whether voluntarily or involuntarily) from the program and wish to apply for readmission must follow the regular admissions procedures. Their admission will be subject to the program admissions criteria in effect at the time of application for readmission.

CODE OF ETHICS

Academic Integrity Standards

The submission by a student of any examination, course assignment, group work, or degree requirement is assumed to guarantee that the thoughts and expressions therein not expressly credited to another are literally the student's own. Evidence to the contrary will result in appropriate penalties, described below.

Cheating on Assignments and/or Exams

Cheating is an affront on academic integrity and ethics. Any instance of dishonesty undermines your work and the work of your classmates and the University.

Plagiarism

In defining plagiarism, this policy distinguishes between Intentional Misrepresentation (which is deemed to constitute plagiarism) and Misuse of Sources. These are two clear extremes, but this policy also recognizes that there can be a continuum between them.

Intentional Misrepresentation occurs when a student deliberately uses someone else's language, ideas, or other original (not common knowledge) work without acknowledging the source. Examples include but are not limited to when a student submits an Assignment that: a) is downloaded from an Internet source and/or obtained from a paper mill; b) is obtained from someone else (including another student); c) contains part or all of the writings of another person (including another student), without acknowledgment of the source; or d) contains passages that were cut and pasted from an Internet source, without acknowledgement of the source.

Misuse of Sources is the unintentional misappropriation of the language, ideas, and work of others due to a lack of understanding of the conventions of citation and documentation, including paraphrasing, quoting, and the parameters of common knowledge.

Students are responsible for knowing how to quote from, paraphrase, summarize, and cite sources correctly.

Penalties and Procedures for Violating Academic Integrity Standards

Accordingly, students or student groups who act in a dishonest manner by cheating or plagiarizing on any examination, course assignment, or degree requirement are subject to penalties under the following procedures. Students working on a group or team assignment who are found violating academic integrity standards shall ALL be considered potential violations. Each student's role in the violation shall be individually reviewed by the Program Director and faculty; however, the group may be held accountable as may be determined by the Program Director and faculty.

Please Note: If a faculty member determines that a student or student group unintentionally misused sources on an assignment, he/she/they may lower the grade on the assignment in question (including lowering to a grade of “F”). No additional penalty should be imposed.

Notification Process

Any member of the Yeshiva University community may initiate a report of cheating on a written exam or plagiarism. The complainant should report the incident immediately, and no later than 5 days after the incident occurred and should submit an Incident Report Form to the Program Coordinator and the Program Director.

- a. A written copy of the charges (cheating or plagiarism) will be submitted to the student no later than 5 business days after the incident was initially reported.
- b. The student is required to then accept or deny responsibility for the actions or challenge the allegations within 2 business days after receiving the report documenting the charges.
- c. If the student accepts responsibility for the action, then appropriate academic sanctions will apply including, but not limited to, a retake of the exam, reduced credit or zero on an exam, reduced final grade or failing grade, resubmit assignment paper or exclusion from other academic opportunities.
- d. If the student denies the allegations, YU Global Student Advocate will conduct an initial investigation to assess the merits of the case within 2 business days after receipt of the student’s statement of denial. The YU Global Student Advocate is a full-time staff member appointed by the Vice President to help students understand academic policies and procedures and to facilitate the initial review of the Academic Integrity process by collecting and reviewing documentation.

Students are not permitted to drop the course in which the alleged incident occurred during or after the process of proceedings under this policy.

Initial Review

If the student denies the allegations, the YU Global Student Advocate will review all submitted evidence and will meet with the faculty, student, and other relevant parties to determine if the case at hand falls within the scope of an academic integrity violation.

Hearing

If the incident appears to violate academic integrity standards, the Program Director will convene a hearing before the YUG Committee on Academic Standards and

Integrity (YUG CASI) to determine if the student violated academic integrity standards no later than 30 days after the student formally denied the incident. The YUG CASI is a 3-person impartial body appointed by the Program Director. A non-voting representative from the Office of the Registrar may also be present for the hearing. The YUG CASI Committee Chair will notify the student in writing of the date, time, and place of the hearing. The student can meet with the Program Coordinator for further clarification on the hearing process. The student may bring written materials and witnesses, but no advocates or advisers (including parents and attorneys). The Committee will consider all the facts and circumstances, may ask for further information from the relevant parties, and will determine whether the student committed an academic integrity violation within 3 business days of the hearing. The Committee will provide a written summary of the hearing and its findings along with its recommendation for appropriate action to the Vice President and Program Director.

Decision

The Vice President and Program Director may accept, reject, or modify the Committee's recommendation, and will notify the student in writing of the decision.

Appeal

Within 2 business days of receipt of the Program Director's letter, the student may file an appeal by submitting it in writing to the Vice President of YU Global. No appeal will be considered if received after the 2-business day deadline. The Vice President will consider the merits of the appeal. The Vice President may interview the student but will not conduct a new hearing. The standard for review will be whether the student received appropriate notice and had an opportunity to be heard (i.e. whether there was a fair hearing), and whether the YUG CASI followed its procedures. The student will receive notice of the decision in writing within 5 business days. This decision is final.

Records

Copies of the final decision (after appeal) will be sent to the Vice President of YU Global and the Program Director and to the Office of the Registrar and may be documented on official transcript.

Reapplication after Dismissal

Students who have been dismissed because of a violation of academic integrity standards may re-apply for admission after two years. Any readmission may require conditions of probation and/or academic or other counseling.

Other Violations of Academic Integrity

In addition to cheating and plagiarism, other examples of academic integrity violations include, but are not limited to:

- Assisting or attempting to assist another student in an act of academic dishonesty.
- Providing papers, essays, research, or other work to aid another student in Intentional Misrepresentation.
- Engaging in unauthorized cooperation with other individuals in completing assignments or examinations.
- Submission of the same assignment, in part or whole, in more than one course, whether at YU Global or another institution, without prior written approval from both faculty members.

If a student commits one of the above (or similar) violations, the faculty member will propose an appropriate penalty. If the student accepts the proposed penalty, the faculty member will notify the applicable Program Director of the action taken. If the student denies the allegations or contests the penalty, the faculty member will notify the Program Director, who will then convene a hearing of the YUG CASI in accordance with the procedures outlined above.

Social Media Use

Students are required to adhere to the Social Media Policy established by the University and outlined in the YU Student Technology Resources Use Handbook: .Any student who posts content (on a personal or University website) that is deemed inappropriate and/or a violation of the YU's Code of Ethics will be subject to disciplinary action.

GRIEVANCES

Grievance Procedure

YU Global is committed to a policy of resolving all student grievances through a set of appeal procedures designed to address the student's issue or concern fairly. Students may appeal evaluation decisions by instructors or faculty advisors when they believe they were subject to harassment, discrimination, and unsubstantiated claims of unsatisfactory performance that deviate significantly from standard evaluation procedures used by that instructor, supervisor or faculty advisor. Note that the procedures set forth in the University's Non-Discrimination and Anti-Harassment Policy (Title IX Policy) will apply in connection with alleged violations under such policy.

If a student has a grievance, he/she/they are assured of due process, respect, and

confidentiality. The following procedure should be initiated within the semester in which the problem or incident occurs and no later than 30 days beyond the final day of classes in any given semester.

- 1. Informal Level:** Students should first discuss their grievance with the primary faculty member who is the subject of the grievance. The purpose of this meeting is to clarify the reasons for the decision or action by the instructor, supervisor or faculty advisor and to provide the student with an opportunity to respond to the decision or action. The meeting also provides an opportunity for the student and the instructor, supervisor or faculty advisor to reach a common understanding of the identified problem(s) and clarify recommendations and the expected timeframe within which problems will be remedied. A follow-up meeting is often scheduled to evaluate compliance with these recommendations. Every effort should be made to resolve grievances at this level and safeguard confidentiality by involving only essential parties.
- 2. Meet with Program Director:** When the student thinks that his/her/their grievance is still unresolved by the instructor, supervisor, or faculty advisor, the student may arrange a meeting to discuss the grievance with the Program Director. Students are expected to submit written documentation of evidence for their grievance within 30 days of the conclusion of the Informal Level process, and preferably by the final day of classes of the semester in which the problem occurred. The Program Director will review all documentation and will notify the student and relevant instructor, supervisor or faculty advisor of his/her/their decision.
- 3. YU Global Committee on Academic Standards and Integrity (YUG CASI):** If the Program Director cannot resolve the student's issue, or the student files (within 30 days) a written appeal of a decision made by the Program Director, then the case will be referred to the YUG CASI. The student can consult with YU Global Student Advocate for support with the appeal process. The faculty on the committee cannot be faculty members from the student's program. The student will have the opportunity to orally present the nature of his/her appeal to the committee. The committee will review all documentation and testimony and will notify the Program Director and the student of their decision to grant or deny an appeal or recommendation on disciplinary action on the issue.
- 4. Review by Vice President:** Should the YUG CASI not be able to resolve the student's issue, or the student wishes to appeal a decision by YUG CASI, the student must submit a written request (within 30 days of the decision) that the Vice President review the action, clearly stating the reasons for such a review.

The Vice President may grant or deny the request. If the Vice President grants the request, he/she will evaluate all the available materials as to the facts and circumstances, including any recommendation from the YUG CASI, and may request a personal interview with the student. The Vice President's decision shall be final as to whether to review the determination, and, if so, whether to adhere to the committee's recommendation.

Health Requirements

Immunization Forms

All Yeshiva University students taking 6 or more credits on campus must meet New York State immunizations requirements for Measles, Mumps, and Rubella and must complete a valid Meningococcal Response Form. The link to the form is available to incoming students by the Admissions office. www.yu.edu/graduateimmunization

STUDENT RESOURCES

Academic Programs

YU Global Academic Programs Team helps students navigate where to go and whom to talk to. Students can email academic@yu.edu to discuss.

Academic Advisement

Every semester, students are expected to meet with an assigned faculty adviser or Program Director to discuss their progress in the program, plan future coursework, review research activities, and plan what comes next after graduation. These advisers are the students' academic navigators, keeping students on course to achieve their personal goals. Students should contact their Program Director for more details.

Canvas

Canvas is Yeshiva University's Learning Management System, and all students (both online and on campus programs) have access to Canvas. Canvas provides 24/7 support to give students the best experience possible when learning online. Students registered for online courses will be invited to participate in a self-paced, online orientation covering the basics of what they need to know about going to YU online.

Students registered in the Master of Science Software Development program will have access to Canvas and to the InfinityLab R&D learning support system to navigate course materials.

Career Center

The YU Global Career Center offers students a range of programs and resources, from personalized counseling and career planning to the latest professional search technologies. Students in the MSSD Program will receive in-depth career support, including assistance with interview skills, the development of a project portfolio to use during interviews, and provide career placement services to every student in the cohort.

Counseling Center

The Counseling Center consults with students on a confidential basis, free of charge. Their staff of qualified and caring professionals provide a calm and objective listening ear and can help students address any issues of concern. To learn more, visit www.yu.edu/student-life/counseling.

Disability Services

The Office of Disability Services collaborates with students, faculty and staff to provide reasonable accommodation and services to students who self-identify as having a disability. The Office's goal is to provide access to all campus programs and activities, thereby empowering students with disabilities to actualize their full academic and personal potential. Please visit the following website for more information about Disability Services, its documentation guidelines and contact information: <https://www.yu.edu/student-life/resources-and-services/disability-services/students>.

Graduate Assistantships

Not applicable.

Health Services

All students taking at least 6 credits on campus must meet New York State immunization requirements for Measles, Mumps, and Rubella and must complete a valid Meningococcal Response. The link to the form is available to incoming students by the Admissions office.

Link: www.yu.edu/graduateimmunization.

All Yeshiva University students who are taking at least 1 credit on campus are required to have health insurance. Students may join a health insurance plan through the University, or they may waive this plan if they have their own health insurance.

Library Services

Yeshiva University's libraries offer a wealth of information and support for advanced learning, research, and scholarly inquiry in an environment dedicated to the open exchange of information. While their primary responsibility lies with the students and faculty of Yeshiva University, the libraries also engage in scholarly, cultural, and artistic interactions with broader communities. Students at any Yeshiva University campus have full access to the entire YU Libraries system. Learn more at www.yu.edu/libraries.

Office of International Students and Scholars

International students and exchange visitors are an important part of Yeshiva University's vibrant community. If enrolled in a STEM specific degree program, international students may qualify for extended Optional Practical Training after graduation.

The Office of International Student and Scholar Services (OISS) provides international students and scholars with immigration support and assistance with cultural adjustment, to help you achieve your educational goals. The OISS also acts as a liaison with the U.S. Department of Homeland Security (DHS) to ensure University-wide legal compliance with government immigration regulations and reporting requirements. International students are encouraged to visit the following website for support with their immigration status as a student at Yeshiva University: <https://www.yu.edu/international-students>

Office of Student Finance

For U.S. citizens and Eligible Non-Citizens, please submit the Free Application for Federal Student Aid FAFSA.

The Program is offered over 3 semesters.

The cost per semester is as follows:

Semester cost:	\$19,200.00
Fees:	\$500.00
Materials:	\$300.00

OneCard

Students' YU ID card is part of the OneCard system, which allows students access to campus buildings, free shuttles, Library accounts, Dining Services, and printing accounts. Students can also download the OneCard app for access to their YU ID card anywhere; follow the instructions at <https://www.yu.edu/yucard/ttps>.

Parking for Students and Alumni

Students and alumni are eligible for parking at our uptown Wilf Campus. To apply for parking, please fill out and submit the applicable [student parking](#) or [alumni](#) parking application. Students should also notify parking@yu.edu regarding any adjustments to their parking account, such as vehicle or scheduling changes.

PROGRAM DESCRIPTION

Software development is central to the growth of STEM and is paramount to every organizational level in corporate, governmental, and non-profit institutions both domestically and internationally. Today, software positively impacts every aspect of daily life from mobile to desktop, applications to programs, devices to appliances, and networks systems. Software increases automation, flexibility, scalability and reliability in all industries. The Master of Science in Software Development is a 36-credit, STEM-oriented graduate program focused on the technological, domain-specific, and managerial competencies required by mid-level software developers who are responsible for researching and developing solutions to address business requirements, mentoring colleagues, performing code reviews and developing software with minimal managerial oversight.

This hands-on program prepares students to seamlessly integrate into the job market through theoretical research and technical application of software development methods and tools. Through Product

Requirements Simulations, task effort estimation, Code Reviews, API Design and team collaboration, students acquire the key professional capabilities crucial to future career success.

Program Student Learning Goals

Graduates will leave the MSc Software Development with a demonstrable ability to:

1. Perform in-depth research on advanced principles of software development.
2. Demonstrate practical application of software development methodologies.
3. Analyze, implement and evaluate complete software solutions.

Program Student Learning Objectives:

Program Goal	Objectives
Perform in-depth research on advanced principles of software development.	Investigate the tools, data structures, system programming, communication and expressions in software development and how they are applied to system design, methods, and techniques.
	Explain research findings to team members including answering questions and defending position.
Demonstrate practical application of software development methodologies.	Apply practical software development skills for tools, data structures, system programming, communication and expressions acquired through research, experimentation and testing.
	Present application assignments to the team including peer reviews and critique, cultivating communication skills and teamwork capabilities.
Analyze, design, implement and evaluate complete software solutions.	Assess theoretical comprehension and technical application of software development methods and tools, using critical analysis and time management planning skills.
	Apply the software development methods and tools using autodidactic capabilities to identify limitations, problem solve and deliver.

Admissions Requirements

Students are required to submit:

- Completed online application
- US Non-refundable \$50.00 Application Fee
- Official transcript of completion of the bachelor's degree from a nationally accredited institution with a minimum cumulative GPA of 3.2.
- Letter of Intention
- Submit three letters of academic recommendation and/or professional reference
- Complete the Program Assessment
- Most recent Resume/Curriculum Vitae
- Interview with the Degree Program Coordinator
- Submit proof of immunizations in compliance with university policy

DEGREE REQUIREMENTS

Students are required to have their own PC laptop to enter the program. Students are required to pass all courses to graduate.

CURRICULUM: COURSE DESCRIPTIONS

SDOL1000

Course: Linux Development Environment and Tools 1

Credits: 1

Prerequisites: None

Instructor: Dr. Dmitriy Laschov

Course Overview:

This foundational course immerses students in the Linux environment, emphasizing operating system application layers and computer hardware architecture. The curriculum covers essential topics such as memory organization, shell techniques, and process management, providing students with the knowledge necessary to navigate the Linux development landscape.

SDOL2000

Course: Foundations of Procedural Programming

Credits: 4

Instructor: Dr. Dmitriy Laschov

Course Overview:

Students will explore the core concepts and principles underpinning procedural programming languages in this introductory course. Key topics include expressions, variables, functions, and file input/output operations. Through hands on exercises, students will gain a solid understanding of the fundamentals of programming languages.

SDOL3000

Course: Implementations of Applied Data Structures 1

Credits: 3

Prerequisites: None

Instructor: Dr. Dmitriy Laschov

Course Overview:

This course delves into the design and implementation of fundamental data structures, with a focus on Abstract Data Types (ADTs) and efficient design practices. Students will engage with hands-on learning to develop high performance implementations of various data structures, enhancing their ability to work with complex data.

SDOL4000

Course: Fundamentals of System Programming

Credits: 2

Prerequisites: None

Instructor: Dr. Dmitriy Laschov

Course Overview:

In this course, students will explore the intricacies of memory management and memory handling, focusing on topics such as virtual

memory and memory segments. Through practical exercises, they will learn to implement memory allocation schemes and avoid common pitfalls.

SDOL5000

Course: Linux Development Environment and Tools 2

Credits: 1

Prerequisites: Linux Development Environment and Tools 1

Instructor: Dr. Dmitriy Laschov

Course Overview:

Building on the foundation of Linux Development Environment and Tools 1, this course introduces essential tools and paradigms for increasing development process efficiency and flexibility. Students will gain experience with source control, low-level debugging, and testing methodologies.

SDOL6000

Course: Algorithm Interfaces and Implementations

Credits: 3

Prerequisites: None

Instructor: Dr. Dmitriy Laschov

Course Overview:

This comprehensive course provides students with an understanding of algorithm fundamentals, focusing on the implementation of common sorting algorithms. Through hands-on exercises, students will learn techniques such as recursion and backtracking, as well as state machine implementation for complex problem solving.

SDOL7000

Course: Implementations of Applied Data Structures 2

Credits: 2

Prerequisites: Implementations of Applied Data Structures 1 Course

Instructor: Dr. Dmitriy Laschov

Overview:

Delving deeper into advanced data structures, this course leverages dedicated algorithms and data structures to enhance students' understanding and proficiency in working with complex data in real-world applications.

SDOL8000

Course: Cyber Threat Landscape and System Programming Credits:

3

Prerequisites: Fundamentals of System Programming

Instructor: Dr. Dmitriy Laschov

Course Overview:

This course takes a holistic approach to the cyber threat landscape and

advanced system programming. By focusing on cyber-attack methods and techniques used by offensive actors, students will learn the essentials of the Cyber Kill Chain, Exploitation, Visibility & Monitoring. Students will then examine processes, threads, atomics, and synchronization objects, exploring Inter Process Communication (IPC) using signals. They will then implement complex problems for sorting algorithms, addressing the producer-consumer synchronization challenge through multithreading.

SDOL9000

Course: Open Lab Final Project

Credits: 1

Prerequisites: Open Lab Courses

Instructor: Dr. Dmitriy Laschov

Course Overview:

In this capstone course, students will integrate their learning from the Open Lab curriculum into a project suitable for showcasing in their professional portfolio. The project will focus on implementing a Watchdog project in C, utilizing data structures, multiple threads, and concepts from previous courses including Cyber Kill Chain, Exploitation, Visibility & Monitoring to demonstrate students' proficiency in the subject matter.

**After completion of the Open Lab, students will select one of the following specialization tracks: $\frac{3}{4}$ RD track
 $\frac{3}{4}$ Full stack track**

RD Track

The RD track provides a 'bottom-up' approach to learning – with in-depth theory and an array of under-the-hood technologies and respective skills that are relevant for a wide range of software development disciplines. Topics focus on systems, networks, architectures & topologies, environments, frameworks, professional tools, coding styles, development environments, the software development lifecycle (SDLC), additional programming languages and implementation techniques.

SDRD1000

Course: Introduction to File System

Credits: 1

Prerequisites: Open Lab

Instructor: Dr. Dmitriy Laschov

Course Overview:

This foundational course delves into the essentials of file systems, and their underlying implementations. Students will gain a solid understanding of file system theory and engage in hands-on practice

parsing file systems, preparing them for more advanced topics in computer science.

SDRD2000

Course: Object Oriented Programming, C++ Internals and Applied

C++

Credits: 4

Prerequisites: Open Lab

Instructor: Dr. Dmitriy Laschov

Course Overview:

This in-depth course explores the C++ language and Object-Oriented Programming design principles, offering students a comprehensive understanding of C++ internals. Through practical applications, students will master Resource Acquisition Is Initialization (RAII), bitwise operations, standard containers, scope locks, and shared pointers, strengthening their programming skills.

SDRD3000

Course: Networking and IPC

Credits: 2

Prerequisites: Open Lab

Instructor: Dr. Dmitriy Laschov

Course Overview:

This course introduces students to the core concepts of inter-process communication theory, mechanisms, and the OSI 7-layer model. By examining the inner workings of shared memory, pipes, TCP, UDP, the HTTP & HTTPS protocols, and the cyber security fundamentals of networking, infrastructure & application security, students will gain a broad understanding of various networking and security principles critical to computer science.

SDRD4000

Course: Implementations of Design Patterns Using C++

Credits: 3

Prerequisites: Open Lab

Instructor: Dr. Dmitriy Laschov

Course Overview:

Focusing on software design capabilities, this course teaches students the application of Unified Modeling Language (UML) and design patterns. Students will investigate and implement advanced design patterns, emphasizing multithreading, libraries, scheduling, and factories, equipping them with the skills to develop efficient, flexible, and maintainable software.

SDRD5000

Course: Final Project - Infrastructure

Credits: 2

Prerequisites: Open Lab and RD Track Courses

Instructor: Dr. Dmitriy Laschov

Course Overview:

In this capstone course's first segment, students will apply their accumulated skills and secure coding knowledge to a large-scale IoT project. This real-world RAID01 driven application, suitable for inclusion in their professional portfolio, integrates multiprocessing, multithreading, IPC, advanced design patterns, scheduling, and file system management. Students will focus on the master side of the project, ensuring a robust and efficient system.

SDRD6000

Course: Final Project – NBD Application and Communication

Credits: 1

Prerequisites: Open Lab, RD Track Courses

Instructor: Dr. Dmitriy Laschov

Course Overview:

The second part of this capstone course involves the continued development of the secure IoT project, with students concentrating on master-side kernel-to-user mode communication. They will create a system capable of recognizing file system changes in the kernel and reacting accordingly in user mode, broadening the project's functionality and versatility.

SDRD7000

Course: Final Project - Embedded

Credits: 3

Prerequisites: Open Lab and RD Track Courses

Instructor: Dr. Dmitriy Laschov

Course Overview:

In the final segment of the capstone course, students will implement the minion side of their secure IoT project, compiling and running it within an embedded architecture. This hands-on experience emphasizes seamless integration and finalization, demonstrating the comprehensive skills and knowledge acquired throughout the RD Track.

SDRD8000/SDFS7000

Course: Methods and Applications of Interviews

Credits: 1

Prerequisites: None

Instructor: Dr. Dmitriy Laschov

Course Overview:

This course aims to prepare students for professional interviews by emphasizing a strategic approach to both technical and interpersonal skills through guided instruction, interactive exercises, simulation and

feedback sessions. Students will learn to identify key interview topics, prioritize information, and effectively communicate within the interview framework, ultimately increasing their chances of success.

Full Stack Track

The Full Stack – Back-End track provides a ‘top-down’ approach to learning, with a comprehensive exposure to the technologies, tools and trends of back-end Web development and Web services, including specialized and best programming practices, multiple types of system development, databases, APIs, languages, UI/UX basics, networks, and cloud computing.

SDFS1000

Course: Object Oriented Programming, Java Internals and Applied Java 1

Credits: 2

Prerequisites: Open Lab Instructor:

Instructor: Dr. Dmitriy Laschov

Course Overview:

This foundational course provides students with an introduction to the Java language and its core components, such as setup, usage, garbage collection, and Object-Oriented Programming principles. Students will examine enums and inner classes, practice Object-Oriented Design using UML, and learn to write efficient automated tests with JUnit, building a solid foundation in Java development

SDFS2000

Course: Object Oriented Programming, Java Internals and Applied Java 2

Credits: 2

Prerequisites: Open Lab and Object-Oriented Programming, Java Internals and Applied Java 1

Instructor: Dr. Dmitriy Laschov

Course Overview:

Building upon the first course, this class delves into advanced Java concepts, including reflection, exceptions, generics, collections, and concurrency. Students will explore the intricacies of Object-Oriented Programming and apply this knowledge to implement various data structures, further strengthening their Java development skills.

SDFS3000

Course: Implementations of Design Patterns Using Java

Credits: 2

Prerequisites: Open Lab Syllabi

Instructor: Dr. Dmitriy Laschov

Course Overview:

In this course, students will investigate design patterns and their implementation, as well as the design process for addressing common software challenges. Through hands-on learning and practical exercises, students will develop problem solving skills and a strong understanding of design principles, enabling them to create more robust and efficient software systems.

SDFS4000

Course: Applied Java Backend Development

Credits: 2

Prerequisites: Open Lab

Instructor: Dr. Dmitriy Laschov

Course Overview:

This course examines the principles and advanced aspects of Java backend development, focusing on interactions with files, JAR files, networking, REST APIs and the cyber security fundamentals of networking, infrastructure & application security. Students will gain hands-on experience using Apache tools such as Maven and Tomcat, developing a practical understanding of Java's backend capabilities and potential real-world applications.

SDFS5000

Course: Introduction to Frontend Development

Credits: 1

Prerequisites: Open Lab

Instructor: Dr. Dmitriy Laschov

Course Overview:

This introductory course acquaints students with the fundamentals of frontend web development, providing the foundation needed to create visually appealing and interactive web pages. Students will learn the basics of HTML, CSS, and JavaScript, exploring their interplay and how to leverage each to produce a user friendly web experience. Practical exercises and projects will help students develop the skills necessary to excel in frontend web development.

SDFS6000

Course: Final Project

Credits: 4

Prerequisites: Open Lab and Full Stack Track Courses

Instructor: Dr. Dmitriy Laschov

Course Overview:

In this capstone course, students will apply their knowledge from the Full Stack Track to an intricate, secure IoT database project. This real-world project, suitable for inclusion in a professional portfolio, focuses on the application of backend and frontend technologies for data collection, tracking, bug logging, and updating IoT products. Students will design

and implement a comprehensive system, emphasizing scalability, configurability, asynchronous design patterns, and the creation of fault-tolerant servers, ensuring a robust and efficient final product.

SDRD8000/SDFS7000

Course: Methods and Applications of Interviews

Credits: 1

Prerequisites: None

Instructor: Dr. Dmitriy Laschov

Course Overview:

This course aims to prepare students for professional interviews by emphasizing a strategic approach to both technical and interpersonal skills through guided instruction, interactive exercises, simulation and feedback sessions. Students will learn to identify key interview topics, prioritize information, and effectively communicate within the interview framework, ultimately increasing their chances of success.