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# Student Catalog

*Volume 1.4, Published November 22, 2024*

Ohio Registration Number: 2297

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## WELCOME TO MASTERSCHOOL

We believe in lifelong learning and career growth.

Our schools are led by industry experts who share their knowledge and best practices, giving real-life examples from years of experience in leading tech companies.

Our curriculum is designed by accomplished industry professionals and regularly updated in partnership with the world's most promising companies.

Our programs are working. We equip our students with every skill they need to flourish in their first position, but more importantly, we prepare them for the future by teaching them how to master new skills and technologies quickly. We set our standards high and give our students a competitive edge for years to come.

We believe that success is probable when interests are aligned.

## MISSION

We are on a mission to ensure everyone can build inspiring careers.

Since we began our operations internationally in 2019, we have proven that it's possible to reach great heights when talent, hard work, and dedication are matched with an unprecedented recipe of excellence, knowledge, and support.

With the launch of our U.S. operations in 2024, we are excited to watch the magic of this combination come to life every day in the transformation of our students and in the success stories of our graduates.

At Masterschool, we are building a global network of online career-training schools, and partnering with leading industry professionals and companies to not only train our students on their journey to a new career but to push them forward and upward toward new goals and summits.

## BELIEF STATEMENTS

**Student Success Above All:** At Masterschool, we prioritize our students' success in every decision we make. We believe that empowering our students to launch their careers is the true measure of our success.

**Authentic Ownership:** We take full responsibility for our actions, striving to improve ourselves and the institution every day. From faculty to students, everyone is accountable for making Masterschool a place where success is inevitable.

**Collaboration and Teamwork:** We understand that real progress happens when we work together as a team. Our community is built on support, open communication, and the shared goal of achieving great outcomes for every student.

**Continuous Improvement:** We believe in the power of lifelong learning, constantly evolving our programs and teaching methods to stay ahead of industry demands. Every day presents a new opportunity to be better than yesterday.

**Positive Energy:** We foster an environment of encouragement and positivity. By being energy givers, we inspire and uplift each other, fueling our community to overcome challenges and reach new heights.

## PROFILE OF A SUCCESSFUL GRADUATE

Graduates of Masterschool will:

1. **Secure employment** in IT fields such as Data Analysis, Cyber Security, and Software Engineering by leveraging their industry-specific training, professional certifications, and communication skills.
2. **Demonstrate proficiency** in their chosen field, including data analysis, network security, software development, or machine learning, with hands-on experience in using cutting-edge tools and methodologies.
3. **Possess a solid foundation** in critical technical skills, such as programming, data manipulation, cybersecurity fundamentals, and systems engineering, allowing them to provide effective and innovative solutions tailored to diverse industry needs.
4. **Exhibit adaptability and innovation** by staying informed on the latest technological advancements and trends, continuously mastering new skills to remain competitive in the evolving tech landscape.
5. **Value working in diverse teams**, embracing different perspectives, and fostering inclusive collaboration to solve complex problems and drive innovation within global and multicultural work environments.
6. **Communicate effectively** with peers, clients, and stakeholders, translating complex technical concepts into clear, actionable insights to drive business decisions and foster collaborative environments.
7. **Build strong, professional networks** through participation in career support services, personal mentorship, and connections with global hiring partners, fostering career growth and long-term success.
8. **Commit to lifelong education and professional development**, continuously seeking new knowledge, certifications, and skills to stay at the forefront of their field and adapt to the dynamic nature of the tech industry.
9. **Adhere to the highest ethical standards** in their work, ensuring data privacy, cybersecurity compliance, and responsible use of technology while demonstrating professionalism in all interactions.

## OWNERSHIP

Masterschool is a private limited company registered with the Secretary of State to conduct business in Ohio. The founding officers are:

- Otni Levi, Co-Chief Executive Officer
- Michael Shurp, Co-Chief Executive Officer
- Eran Glicksman, CTO
- Roi Tzikorel, Chief of Impact

## LICENSURE

Masterschool is approved to operate by the Ohio State Board of Career Colleges and Schools (OSBCCS) in the State of Ohio. Its OSBCCS registration number is #2297.

Masterschool is not accredited nor does it participate in any state or federal student financial aid programs, such as Title IV.

## ADMINISTRATION

COO  
School Director

Michael Assor  
Jennifer Lamkin

## OPERATING HOURS

Masterschool's administrative office hours are Monday through Friday, 9:00 a.m. to 4:00 p.m. ET. During this time, prospective and current students can reach staff via phone or email.

Classes may be scheduled outside of these hours. Additionally, faculty members are available to students through Slack, Intercom, and email for student questions and respond to inquiries within 1-2 business days.

The following holidays are observed by Masterschool.

- New Year's Day
- Martin Luther King, Jr. Day
- President's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving and the day after
- Winter Holiday Break (Christmas Eve through New Year's Eve)

## START DATES AND CLASS SCHEDULE

Masterschool offers open admissions and enrollment. Applications are accepted and evaluated on a continuous basis. Upon acceptance, applicants may complete the enrollment procedure and begin training at the next start date.

Program	Start Dates	Completion Dates
Cyber Analyst	May 28, 2024 September 3, 2024	February 28, 2025 June 3, 2025
Cyber Analyst - Advanced	May 28, 2024 September 3, 2024	November 28, 2025 March 3, 2026
Data Analyst	May 28, 2024 September 3, 2024	February 28, 2025 June 3, 2025
Data Analyst - Advanced	May 28, 2024 September 3, 2024	November 28, 2025 March 3, 2026
Software Engineering	May 28, 2024 September 3, 2024	February 28, 2025 June 3, 2025
Software Engineering - Advanced	May 28, 2024 September 3, 2024	November 28, 2025 March 3, 2026

## ADMISSIONS REQUIREMENTS AND ENROLLMENT PROCEDURES

Applicants for admission into Masterschool must meet the following requirements. Any questions regarding admissions requirements, the program, payment options, or other Masterschool services should be directed to [hey@masterschool.com](mailto:hey@masterschool.com).

### Admissions Requirements

Masterschool is open to individuals interested in starting or advancing in an IT career. No prior IT experience is required. Masterschool places a premium on motivated individuals, with grit, determination, and aptitude, regardless of previous knowledge or experience. However, in order to be accepted, applicants must meet the admissions requirements listed below.

Masterschool verifies that the following requirements are met through the application and admissions process:

- Must have a minimum of a High School Diploma, a General Education Development (GED) certificate or the equivalent, or have obtained a home school credential;
  - Masterschool will accept current college or university enrollment or completion as verification of meeting this requirement;
- Must be 18 years of age;
- Must understand mathematics at a high school level;
- Must be able to read, write, and understand English;
- Must have basic computer literacy skills;
- Must be comfortable working in a digital environment with technical tools and numbers;
- Must have regular and reliable access to computer equipment and broadband internet.

### Enrollment Procedures

Individuals interested in applying must create an account at [Masterschool.com](http://Masterschool.com) and submit an application along with all required supporting documents.

Once the application has been submitted, Masterschool reviews the application. Then the applicant must complete an interview. During the interview, the Admissions Agent asks any questions regarding information submitted in the application. The Agent also discusses the technical skills requirements with the applicant and verifies they have the minimum required skills to participate in the program successfully.

Prospective students who meet all admissions requirements are accepted into Masterschool.

If the prospective student does not meet the admissions requirements and is not accepted for admission into the program.

Accepted applicants make financial arrangements with Masterschool to pay for their training program. Masterschool then provides the enrollment agreement and a copy of the Student Catalog for review and signature. The enrollment agreement signed by the accepted applicant is then signed by a Masterschool school official. The accepted applicant is officially a student and provided a copy of the fully executed agreement.

All students complete an orientation which includes the Ohio Student Disclosure Course. Once the orientation is complete, students are ready to begin their program of enrollment.

### **Admissions Appeals**

Appealing an admissions decision must be completed within seven (7) calendar days of the initial admissions decision. If a prospective student feels that he or she has received a denial of admission in error, the prospective student may appeal the decision by submitting a written appeal. The School Director (and/or designated staff member) will review the material and notify the prospective student of their decision in writing.

## **TRANSFER OF CREDIT**

### ***Transfer from Masterschool GMBH into Masterschool US***

Students and graduates of Masterschool GMBH who wish to transfer into the Masterschool US entity or continue their education at the US school entity must first complete the admissions process. If accepted into the US institution, the student will receive credit for training completed at Masterschool GMBH, provided that:

- the training was completed within the last 2 years;
- the current courses are substantially the same as the courses completed;
- the student successfully passed the courses with a grade of at least 70%; and
- the student earned any required course related certifications.

Masterschool will review the student's record and apply applicable transfer clock hours. The length and cost of the program will be adjusted on the enrollment agreement prior to signing.

### ***Transfer into Masterschool***

The acceptance of transfer credits between institutions lies within the discretion of the receiving institution. Credits earned at other institutions may or may not be accepted by Masterschool. Likewise, coursework completed at Masterschool may or may not be accepted by another institution depending upon its programs, policies, and regulations.

Transfer credits will be evaluated using the following guidelines:

- Only credits earned at an institution that is accredited by an agency recognized by the United States Department of Education and/or the Council for Higher Education Accreditation (CHEA) will be considered. Any credits earned at a foreign institution must have a credential evaluation completed indicating equivalency with Masterschool courses. The potential student is responsible for paying the cost of the evaluation. The student may use any reputable evaluation service. Many options can be found on the National Association of Credential Evaluation Services (NACES) [website](#).
- An official transcript of the student's coursework must be furnished directly by the institution where the coursework was completed before any application for transfer credits can be evaluated.
- A copy of the catalog or course syllabi from the institution at which the coursework was completed, at the time that the coursework was completed, must be furnished before any application for transfer credits can be evaluated.
- A minimum grade of "B" or "3.0" must have been awarded for each course completed to be eligible for transfer. Only courses in which grades were assigned will be considered. Credits earned as a result of a "pass/fail" option are not eligible for transfer.
- Sit for and pass a written and/or practical exam related to the transfer credit curriculum, if applicable.



- Coursework completed more than three years ago is not eligible for transfer of credit.
- Transfer of credit must be completed before enrollment. Submitting an official transcript in a timely manner is the sole responsibility of the student.
- The Vice President shall make the final determination on the acceptability of transfer credits. The above guidelines shall be used in evaluating all applications for transfer of credit; however, the institution reserves the right to accept or reject any or all transfer credits at its discretion.

Up to 50% of a program can be completed via transfer of credit. Students wishing to receive credit for courses taken at other institutions will need to provide all required documents as part of the application process.

Masterschool does not accept advanced placement and credit for experiential learning.

### ***Transfer out of Masterschool***

Transferability of coursework completed at Masterschool is always up to the discretion of the receiving institution. Masterschool does not in any way imply or guarantee the transferability of credit (clock hours) into any other institution. Once the student of the receiving institution provides notification, an official transcript and a certified copy of the catalog will be issued at no cost to the student or the receiving institution.

## **NON-DISCRIMINATION POLICY**

Masterschool encourages diversity and welcomes applications from all minority groups. The school does not discriminate on the basis of race, color, religion, ancestry, national origin, age, non-disqualifying disability, gender, sexual orientation, marital status, or veteran status in the recruitment of students, or in the implementation of its policies, procedures, and activities.

Information pertaining to an applicant's disability is voluntary and confidential. Information obtained that includes disclosure of a disability will be used to overcome the effects of conditions that limit the participation of qualified disabled students. If you believe that you have been discriminated against, please promptly notify the School Director.

## **GRADUATION REQUIREMENTS**

To graduate from any of Masterschool's training programs, students must:

- Achieve an attendance rate of at least 80%.
- Achieve a final (cumulative) grade of at least 80%.
- Satisfy (or have arrangements to satisfy) all outstanding financial obligations to Masterschool.

At the time of completion of graduation requirements, the student will be awarded a certificate of completion from Masterschool.

## **TECHNICAL REQUIREMENTS**

Masterschool provides all enrolled students with a complementary laptop to enhance their learning experience to ensure they have the hardware needed to be successful in the program.

However, students must have access to reliable high-speed internet in order to participate in classes, complete homework, and finish the program. The program is compatible with any modern internet browser.

## **ACADEMIC & TECHNICAL SUPPORT SERVICES**

Academic and technical support services are available via the student's designated teaching assistant. Students can contact their teaching assistant via Slack, Intercom, or email. Additionally, students can get assistance during live, online class sessions held on Zoom.

Faculty and teaching assistants are required to respond to student questions submitted outside of class within 2 business days, though they typically respond much quicker.

## **CAREER SERVICES**

Masterschool is committed to helping graduates begin a training-related career in tech.

The team at Masterschool does everything necessary to help graduates find a job including finding job opportunities and helping build a career network. The career support includes workshops, personal mentorship, connections with global hiring partners, which include the world's top tech companies, possible internships, and much more.

Masterschool continues to support alumni post-employment. If a graduate needs help with finding a new job, conducting a salary negotiation, asking for a promotion, or anything else, the team is here to help. Masterschool's ultimate goal is that graduates continue to grow and advance beyond their first job in tech, and the team at Masterschool wants to be a partner in that process!

While Masterschool actively engages to assist graduates with employment, Masterschool cannot guarantee job placement or wages.

## **POSSIBLE JOB TITLES**

The Cybersecurity Analyst and Cybersecurity Analyst – Advanced programs prepare students for employment in an IT role in any industry. Possible job titles include Cybersecurity Analyst, Information Security Analyst, IT Project Manager, IT Support Specialist, IT Support Level 1, Junior Network Administrator, and GRC Consultant.

The Data Analyst and Data Analyst – Advanced programs prepare students for employment in a data analyst role in a variety of industries. Possible job titles include Data Analyst, Business Analyst, Business Intelligence (BI) Analyst, Data Engineer, Quantitative Analyst, Operations Analyst, Market Research Analyst, Financial Analyst, and Data Consultant.

The Software Engineering and Software Engineering – Advanced programs prepare students for employment in a software engineering or development role. Possible job titles include Software Engineer/Developer, Programmer, Web Developer, Backend Developer, and Frontend Developer.

## ATTENDANCE

Masterschool emphasizes the need for all students to attend classes consistently to develop the skills and knowledge necessary to be successful in today's competitive job market. The classroom is like the future work environment and arriving on time every day is essential to maintaining employment. Therefore, attendance is critical for success at Masterschool.

### Online Attendance Policy

Masterschool's programs are offered in a synchronous online format. Attendance requirements are similar to an in-person class, although the students are separated by distance. Students are expected to be in class on time every day to achieve the learning goals for their program of study. Students, whether present or absent from class, are responsible for knowing all that is announced, discussed, and/or lectured upon in class. In addition, students are responsible for submitting on time all assignments and examinations as required in the class. Students are expected to attend all class hours. However, students must have a cumulative attendance rate of 80% or higher at each evaluation point to remain in good standing. (See Satisfactory Academic Program policy.)

Attendance rates will be provided to students at the end of each course. If a student's attendance rate is under 80%, the student will complete an advising session with the assigned teaching assistant or Chief Academic Officer (CAO) to create a plan to improve attendance, which may include scheduling make-up hours.

***To graduate, students in any program must achieve a minimum attendance cumulative rate of 80% in their program.***

### **Excused Absences**

Masterschool understands that from time to time absences may be unavoidable due to illness, appointments, or personal/family emergencies. Therefore, the school allows for 45 clock hours of excused absence (absence that does not have to be made up) for each 450 clock hours of scheduled training in each program. Any unused excused absence hours do not roll over into the next scheduled training period. Additionally, they cannot be combined and used in a single 450 training period. Excused absences still impact the student's attendance rate and thus, satisfactory academic progress. Masterschool strongly recommends that students attend all scheduled program hours.

### **Tardiness and Early Departures**

Any student arriving up to 5 minutes after the start of class will be considered tardy. Additionally, any student who leaves class up to 5 minutes before the scheduled end will be considered an early departure.

Students who are more than 5 minutes late or who depart more than 5 minutes before the end of class will be marked absent for an entire class hour.

### **Attendance Monitoring**

Attendance is taken at the beginning of each class. The instructor keeps record of attendance, and records when a student departs early.

### **Make-Up Work**

Make-up work is assigned by the instructor and must be completed within the agreed upon time-frame, which is based on the length of the absence and scheduling availability. Make-up work will be comparable to content missed, in subject, delivery method, and length. There is no additional charge for makeup work.

### **Administrative Attendance Termination**

Any student who is absent for fourteen (14) consecutive calendar days will be terminated from his/her program. After notifying the student of a withdrawal for violation of the attendance policy, the School Director completes a refund calculation. Any money due back to the student, or to a third-party funding source, is returned per the refund policy. A student dismissed for attendance-related reasons may re-enroll in the institution only with the School Director's written authorization and verification that all current admissions requirements are met.

## **LEAVE OF ABSENCE**

There may be legitimate reasons such as extended illness, extended illness of close family members, or military service, in which a student needs an interruption in their training program. In such cases due to specified and approved reasons and with appropriate documentation, the student may request a leave of absence. The leave of absence is considered a temporary break in a student's attendance during which they are considered to be continuously enrolled. In order to attain a Leave of Absence (LOA), the following policy must be adhered to prior to approval of the leave:

- The Leave of Absence is limited to **180 calendar days in any 12-month period or one-half of the published program length**, whichever is **shorter**. Multiple leaves of absence may be permitted provided the total of the leaves does not exceed this limit.
- The leave of absence must be requested in writing in advance of the beginning date of the leave unless circumstances prevent the student from doing so. If the student does not request a leave of absence within a timeframe consistent with the 14-day consecutive absence policy, the student will be withdrawn.
  - If a student is unable to make the request in writing, over the phone is acceptable. The request can also be submitted by a relative or legal guardian.
- The student must sign and date the leave-of-absence request and specify a reason for the leave, providing supporting documentation, as necessary. The request must specify the specific date of return following the leave and the student must attest to understanding the consequences of not returning from an approved on the date specified.
- The Leave of Absence request must be approved and signed by the School Director.
- Failure to return from the approved leave of absence on the exact return date as shown on the Leave of Absence written request will result in termination from the program of study.

Masterschool will document its decision relative to each LOA request in accordance with this policy. Documentation of each request and the related decision will be maintained in the student's file.

No additional charges will be assessed as a result of an approved LOA.

## SATISFACTORY ACADEMIC PROGRESS

The Satisfactory Academic Progress Policy is applied consistently to all students. Satisfactory Academic Progress is measured in two ways:

- **Qualitatively:** The Cumulative Grade Point Average (CGPA) is reviewed to ensure that the student is meeting a minimum 2.0 (C) average at the conclusion of each evaluation period.
- **Quantitatively:** The student must attend at least 80% of the scheduled clock hours cumulatively for each evaluation period, enabling completion within the maximum time frame of the program.\*

A student must be meeting these standards to be considered meeting Satisfactory Academic Progress and in 'Good Standing.' Any student who has not achieved a minimum cumulative GPA of 2.0 or who has not successfully achieved a cumulative rate of attendance of at least 80% at each required evaluation period is not considered in 'Good Standing' and is subject to the consequences outlined in this policy.

### Maximum Time Frame

Students must complete their program within 150% of the normal program length. This length of time is considered the Maximum Time Frame. Students who have attempted over 150% of the total program clock hours and not met the graduation requirements, will be withdrawn from the program.

### Evaluation Periods

Students will receive a grade report at the end of each course which includes their final grade and attendance for the course completed, as well as the cumulative GPA and cumulative attendance percentage for all courses completed within the program. Formal evaluations will occur at the midpoint, end of program, and, if needed, at the Maximum Time Frame based on scheduled hours. Consistent with SAP measurements, the evaluations will assess each student's progress against the qualitative and quantitative standards previously identified.

### Warning Period

If a student fails to meet the cumulative 80% attendance, and/or the cumulative 2.0 grade average for any evaluation period, he or she will be placed on 'Warning' for the next evaluation period.

Students will be notified in writing when placed on 'Warning.' The notification will include the steps necessary to be removed from 'Warning' status. In addition, students will receive attendance and/or academic advising from the Program Administrator. During this time, an academic improvement plan will be created to assist the student in achieving 'Good Standing' by the end of the 'Warning' period. If the student achieves 'Good Standing' by the end of the 'Warning' period, he or she will be removed from 'Warning' status.

If the student fails to achieve 'Good Standing' and meet satisfactory academic progress requirements at the end of the 'Warning' period, the student will be terminated from Masterschool. The institution will notify the student in writing if he or she is being terminated for unsatisfactory academic progress. The student has the option to appeal termination by following the appeal process.

### Appeal Process

The student may submit a written appeal of his/her termination within five calendar days of their receipt of the notice of termination. The appeal must be accompanied by documentation of mitigating

circumstances that have prevented the student from obtaining 'Good Standing' and evidence that changes have occurred to allow the student to now meet standards of Satisfactory Academic Progress. Only extraordinary circumstances will be considered, such as, but not limited to, death or severe illness in the immediate family. Supporting documentation such as a physician's statement, accident report, or other such statements must be included as part of the appeal.

The President will assess all appeals and determine whether the student may be permitted to continue in the school on a 'Probationary' status despite not meeting the Satisfactory Academic Progress requirements. The student will be sent a written decision within ten days of the receipt of the appeal. The decision of the President is final.

In cases where an appeal is accepted, the student is placed on 'Probation' status through the next evaluation period. During this time, an academic improvement plan will be created to assist the student in achieving 'Good Standing' by the end of the 'Probation' period.

### **Probation Period**

If a student fails to meet the Satisfactory Academic Progress standards at the end of the 'Warning' period, and successfully appeals the termination, he or she will be placed on 'Probation' status. Students will be notified in writing when placed on 'Probation'. The notification will include the steps necessary to be removed from 'Probation' status. In addition, students will receive attendance and/or academic advising from the Program Administrator. During this time, an academic improvement plan will be created to assist the student in achieving 'Good Standing' by the end of the 'Probation' period.

At the end of the evaluation period, and then at the end of every evaluation period thereafter, the student's academic status will be reviewed. If the student fails to meet the Satisfactory Academic Progress requirements at the end of the 'Probation' period, the student will be terminated from the school.

### **Transfer and Readmitted Students**

Transfer students from outside the institution will be evaluated qualitatively only on the work completed at the Masterschool. The maximum time frame is reduced for transfer students based on the remaining length of the program in which they enroll.

### **Incomplete Courses**

A grade of Incomplete is not included in the calculation of the cumulative grade point average. However, the final grade issued three (3) days after the end of the course, whether or not the incomplete coursework was completed, is calculated in the cumulative grade point average. The course hours count as hours attempted for the purpose of calculating progress toward the maximum time frame.

### **Remedial Courses**

Masterschool does not offer any remedial courses.

### **Course Repeat Policy**

A failed course may be repeated in an attempt to earn a passing grade. Each attempt counts as scheduled hours toward the Maximum Time Frame. Only the highest grade earned will be included in the computation of the cumulative grade point average. The student transcript will list each course in which a student has enrolled and earned a grade. The failing grade will be changed to a grade of R on the transcript indicating that a particular course has been repeated.

## RE-ADMISSION POLICY

Any student who has voluntarily withdrawn may apply for readmission. Students who were administratively withdrawn from their program for academic performance issues, attendance issues, or school policy violations may also reapply for readmission.

A student who voluntarily withdrew or was administratively withdrawn from a program and applied for readmission within 180 days of their last date of attendance is considered a 'reenter' status and will receive academic credit for all previously completed courses.

Any student who voluntarily withdrew or was administratively withdrawn from a program and seeks readmission later than 180 days of their last date of attendance is considered a 're-enroll' status and may be eligible for transfer credit from the previous enrollment.

Any student applying for readmission must meet all admission requirements effective at the time of readmission. Readmission will be subject to demonstration that the conditions that caused the dismissal or withdrawal have been rectified. Depending on the circumstances surrounding the withdrawal or dismissal, a student seeking readmission may be required to wait for up to 6 months so that the school can be sure the conditions have been rectified. In some cases, readmission may be denied; for example, if a student was dismissed for drug or alcohol use on the school premises, harassment, or threats of violence against the school, employees, or other students. Each readmission application is reviewed on a case-by-case basis.

Any student accepted for readmission, whether rejoining Masterschool in 'reenter' or 're-enroll' status, must complete a skill evaluation with the Executive Director or Director of Education. If the skill evaluation is not passed, students in a 'reenter' status will be required to attend additional lab hours, even for courses that they successfully completed within the 180-day period. Students in the 're-enroll' status will not be eligible to receive a transfer of credit for previously completed courses if the skill evaluation is not passed.

## GRADING

Masterschool uses the following grading scale for all programs and courses.

Percentage	Grade	GPA
100%-90%	A	4.0
89%-80%	B	3.0
79%-70%	C	2.0
69%-60%	D	1.0
59%-Below	F	0.0
Transfer Credit	TC	N/A
Incomplete	I	N/A
Withdraw	W	N/A

TC: Transfer credit. A grade of “TC” will be given for coursework accepted for transfer credit per the Transfer of Credit policy.

I: Incomplete. A grade of “I” will be given if the student does not complete the required class work, assignments, and tests by the end of the course or program. Incomplete coursework must be completed within three (3) days of the scheduled end date of the course. If the coursework is not completed by the deadline, the student will receive the grade earned for the class with the missing work recorded as zeros.

W: Withdraw. A grade of “W” will be given if the student withdraws from a course or is administratively withdrawn from a course.

## TRANSCRIPT REQUEST

Requests for official transcripts and official records of clock hours completed are processed by email request. Masterschool maintain copies of final transcripts in perpetuity. Students must email [hey@masterschool.com](mailto:hey@masterschool.com) to request official transcripts. Please allow 5-7 business days for the request to be processed. There is no cost to request and receive transcripts electronically. Charges apply for transcript that must be mailed in hard copy.

## STUDENT CONDUCT

Masterschool provides education to a diverse student body. All Masterschool students are expected to abide by specific standards of conduct that allow for professional development, open communication, and positive campus culture. The Student Code of Conduct provides a set of guidelines under which students may achieve their educational goals while also respecting the rights of other students and staff, as well as the campus itself. Other institutional policies, such as non-discrimination policies, further define expectations for student conduct and will be used alongside this policy in applicable situations. Substantiated violations of the Student Code of Conduct are addressed promptly through the Institution’s defined disciplinary process.

**Overview of the Standards of Conduct:** By enrolling, students agree to adhere to these standards of conduct. Masterschool provides all students with opportunities to address concerns related to this policy. Students seeking information should first consult this defined policy and make their concerns known to the appropriate administrator.

In order to remain in good standing as alumni and to receive associated benefits such as career advising assistance, students are expected to continue to comply with the standards of conduct in all dealings activities. Therefore, it is the expectation of Masterschool that both students and alumni will exemplify professional, courteous, and mature behavior. Such behavior includes, but is not limited to, the following standards of conduct:

- *Respecting the rights of others without regard to race, color, national origin, gender, sex, age, and disability;*
- *Using language that is professional and free from profanity;*
- *Appearing on camera in online classes in appropriate, professional attire;*
- *Respecting the property both of Masterschool and of its educational community by doing no harm or damage to the facility, its contents, the property of others;*



- *Adhering to all local, state, and federal laws related to copyright, harassment, and fair-use;*
- *Non-Disclosure Agreement: Student agrees not to disclose any institute-specific information, training and video materials to other parties.*

All students are expected to maintain honesty, integrity, and ethical behavior in all academic pursuits. Cheating in any form, including but not limited to copying from others, using unauthorized materials during exams, or obtaining assistance from prohibited sources, is strictly prohibited. Plagiarism, which includes copying someone else's work without proper citation or claiming someone else's ideas as one's own, is a serious offense. Students found guilty of academic dishonesty, including cheating or plagiarism, face a range of consequences, including but not limited to failing grades, academic probation, suspension, or expulsion from the institution.

These standards of conduct represent the behaviors that Masterschool staff hope to see from all members of its learning community. Violations of these standards are subject to disciplinary actions as outlined in the Institute's Grievance Procedures.

## **ANTI-HAZING POLICY**

Masterschool prohibits hazing as defined in this policy. The school will investigate and respond to all reports of hazing as outlined in this policy.

This regulation applies to all members of the school community, including faculty, staff, students, volunteers, organizations, and groups, as well as visitors and other licensees and invitees.

This Anti-Hazing Policy applies to conduct that occurs on the online learning platform, either in class or in an out-of-class school activity, on-campus (administrative office), off-campus (ex: meet-up), or through online activities, between two or more people who are affiliated with the school, or any student or other organization associated with the school.

Hazing is a serious offense of the Masterschool Student Conduct policy and, therefore, is subject to the full range of sanctions (reprimand, disciplinary probation, suspension, and expulsion). In addition, other educational activities may be required as conditions of the sanction. An individual, organization, or group may be subject to other outcomes in accordance with the applicable outside constituents or groups in which the student is involved, or their governing bodies. The school has the right to take action regardless of the actions of the governing body.

The School Director shall coordinate the investigation of all hazing allegations. When appropriate, other senior administrators may handle certain aspects of the school's response. Local authorities may also be included in the investigation, as needed.

Additionally, the School Director will assess the need for interim measures (e.g. suspension of current group activities). Every effort will be taken to complete the investigation in a timely manner. The hazing allegation will be investigated and resolved in keeping with the Student Conduct process. At the point when a formal conduct charge is made against an organization, the national or oversight organization, if any, shall be notified. Criminal investigations resulting from a report to law enforcement will be handled by the appropriate law enforcement agency. Masterschool may charge an individual or a group with a violation of this Hazing Policy via the Student Conduct policy and/or other school rules, regulations, or policies.

Sanctions applied to organizations and/or individuals will be imposed in accordance with the severity of the violation and will be determined by the School Director.

Hazing means doing any of the following, or pressuring, causing, forcing, soliciting, or coercing any person to do any of the following for the purpose of the initiative, admitting, or affiliating an individual into or with a student group or student organization; continuing or enhancing an individual's membership or status in a student group or student organization, or perpetuating or furthering a tradition or ritual of a student group or student organization:

(a) Engage in any conduct prohibited by federal and/or state and/or municipal criminal law, regardless of whether an arrest is made, or criminal charges are brought;

(b) Take into their body any food, liquid (including alcohol), drug, or other substance that subjects the person to a substantial risk of mental or physical harm; and/or;

(c) Cause or create a substantial risk of causing mental or physical harm to another and/or engage in any act or omission that contributes to the death of another.

Reporting an Incident: Student safety is our top priority, and we take all reports of misconduct seriously to protect everyone's health and well-being. Masterschool depends on its community members to identify and report behaviors of concern so that the school can provide distressed students and employees with appropriate support services and resources.

We are all responsible for school safety. If you witness or become aware of any concerning behavior or suspicious behavior, report it to the School Director, Faculty, or any Masterschool Staff member.

## **GRIEVANCES**

All student complaints should be first directed to the school personnel involved. If no resolution is forthcoming, a written complaint shall be submitted to the director of the school. Whether or not the problem or complaint has been resolved to his/her satisfaction by the school, the student may direct any problem or complaint to the Executive Director, State Board of Career Colleges and Schools, 30 East Broad Street, Suite 2481, Columbus, Ohio, 43215, Phone 614-466-2752; toll-free 877-275-4219.

## PROGRAM DESCRIPTIONS, OBJECTIVES & COURSE DESCRIPTIONS

### Cybersecurity Analyst

Hours: 1350 Clock Hours

Length: 9 Months

Description: The Cybersecurity Analyst intensive training program provides participants with essential foundational knowledge and skills to get them job-ready. Students will learn cybersecurity fundamentals that include Google, CompTIA, and Cisco content. They will also practice the skills they are learning, to increase understanding and prepare them for the workplace. During the program, students will develop a stellar portfolio with real-world experience sourced from the world’s leading cybersecurity companies.

Objectives: Upon completion of this program, graduates will be able to:

- Identify and neutralize cybersecurity threats to protect an organization’s data
- Obtain four industry-recognized certifications:
  - Cisco CCNA Professional Certificate
  - CompTIA Security+ Professional Certificate
  - Google IT Support Professional Certificate
  - Google Cybersecurity Professional Certificate
- Program with Python and apply it to security automation tasks
- Explain and apply foundational IT and cybersecurity concepts including:
  - Technical support fundamentals
  - Computer networking basics and advanced concepts
  - Operating systems and system administration
  - IT security practices, risk management, incident detection and response
  - Asset management, threat and vulnerability assessment
- Implement network security principles and implement network protection strategies
- Ensure high availability and implement disaster recovery strategies
- Troubleshoot and resolve IT and network issues
- Use essential professional skills in communication, teamwork, problem-solving and workplace dynamics
- Share a professional portfolio showcasing real-world cybersecurity experience

Outline:

Course Number	Course Title	Theory Hours	Lab Hours
TF-101	Tech Foundations	110	40
CY-102	Google IT Support Professional Certificate	200	100
CY-103	Google Cybersecurity Professional Certificate	200	100
CY-104	CompTIA Security+ Professional Certificate	200	100
CY-105	Cisco CCNA Professional Certificate	200	100
	<b>Total Theory and Lab Hours</b>	<b>910</b>	<b>440</b>

## Course Descriptions:

### TF-101 Tech Foundations

This unit lays the foundational tech skills necessary for success in cybersecurity. Key areas include programming with Python, problem-solving, algorithmic thinking, and basic computer operation skills like touch typing and using keyboard shortcuts. The unit aims to develop both technical prowess and essential soft skills such as time management.

### CY-102 Google IT Support Professional Certificate

Focuses on the skills required for IT and security roles, covering technical support fundamentals, computer networking, operating systems, and system administration, along with IT security basics. This unit equips students with a comprehensive understanding of IT support roles, crucial customer service skills, and security practices.

### CY-103 Google Cybersecurity Professional Certificate

This unit delves into cybersecurity fundamentals such as securing networks, managing digital assets, and responding to security incidents. Students will learn about Linux, threat and vulnerability assessment, and incident detection and response. Python programming tailored for security applications is also covered, enhancing students' abilities to automate tasks and analyze data in security contexts.

### CY-104 CompTIA Security+ Professional Certificate

Prepares students for the CompTIA Security+ certification with a focus on security principles, threat identification, mitigation strategies, and security architecture and operations. It includes extensive exam preparation, covering network security, compliance, risk management, and cryptography. The unit is designed to build a strong foundation in managing and overseeing security programs, with practical application emphasized through various sprints.

### CY-105 Cisco CCNA Professional Certificate

Guides students towards achieving the Cisco CCNA certification, providing both theoretical knowledge and practical networking skills. Topics covered include network fundamentals, routing, switching, network security, and hands-on experience with Cisco networking solutions. The unit also focuses on exam preparation, ensuring readiness for the Cisco CCNA certification. Subjects such as IP connectivity, automation, and programmability are also explored in depth.

## **Cybersecurity Analyst - Advanced**

Hours: 2600 Clock Hours

Length: 18 Months

Description: The Cybersecurity Analyst – Advanced program is a 18-month intensive training program designed to teach participants both foundational and advanced cybersecurity analyst knowledge needed to compete in today's global job market. Students will learn cybersecurity fundamentals, and get hands-on practice to increase understanding and prepare them for the workplace. During the program, students will develop a stellar portfolio with real-world experience sourced from the world's leading cybersecurity companies.

Not only will students earn a Cybersecurity Analyst – Advanced diploma, but they will be prepared to sit for several industry certifications as well, further validating their skills and knowledge to future employers. The certifications include:

- Google IT Support Professional Certificate
- Google Cybersecurity Professional Certificate
- CompTIA Security+ Professional Certificate
- Cisco CCNA Professional Certificate (200-301)
- Microsoft Azure Administrator Associate Certificate

Masterschool’s comprehensive preparation approach ensures that each student receives the support and resources needed to succeed and achieve their goals—both in the program and after graduation.

**Objectives:** Upon completion of this program, graduates will be able to:

- Identify and neutralize cybersecurity threats to protect an organization’s data
- Obtain four industry-recognized certifications:
  - Cisco CCNA Professional Certificate
  - CompTIA Security+ Professional Certificate
  - Google IT Support Professional Certificate
  - Google Cybersecurity Professional Certificate
- Program with Python and apply it to security automation tasks
- Explain and apply foundational IT and cybersecurity concepts including:
  - Technical support fundamentals
  - Computer networking basics and advanced concepts
  - Operating systems and system administration
  - IT security practices, risk management, incident detection and response
  - Asset management, threat and vulnerability assessment
- Manage cloud services in Microsoft Azure spanning storage, security, networking and compute
- Configure virtual networking, implement storage solutions, and deploy virtual machines in Azure
- Implement network security principles and implement network protection strategies
- Manage identities and governance in Azure using Azure Entra ID
- Automate tasks in Azure using PowerShell scripting
- Ensure high availability and implement disaster recovery strategies
- Troubleshoot and resolve IT and network issues
- Use essential professional skills in communication, teamwork, problem-solving and workplace dynamics
- Share a professional portfolio showcasing real-world cybersecurity experience

**Outline:**

<b>Course Number</b>	<b>Course Title</b>	<b>Theory Hours</b>	<b>Lab Hours</b>
TF-101	Tech Foundations	200	50
CY-102	Google IT Support Professional Certificate	300	170
CY-103	Google Cybersecurity Professional Certificate	300	170
CY-104	CompTIA Security+ Professional Certificate	300	170
CY-105	Cisco CCNA Professional Certificate	300	170
CY-106	Microsoft Azure Administrator Associate Certificate	300	170

<b>Total Theory and Lab Hours</b>	<b>1700</b>	<b>900</b>
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Course Descriptions:

TF-101 Tech Foundations

This unit lays the foundational tech skills necessary for success in cybersecurity. Key areas include programming with Python, problem-solving, algorithmic thinking, and basic computer operation skills like touch typing and using keyboard shortcuts. The unit aims to develop both technical prowess and essential soft skills such as time management.

CY-102 Google IT Support Professional Certificate

Focuses on the skills required for IT and security roles, covering technical support fundamentals, computer networking, operating systems, and system administration, along with IT security basics. This unit equips students with a comprehensive understanding of IT support roles, crucial customer service skills, and security practices.

CY-103 Google Cybersecurity Professional Certificate

This unit delves into cybersecurity fundamentals such as securing networks, managing digital assets, and responding to security incidents. Students will learn about Linux, threat and vulnerability assessment, and incident detection and response. Python programming tailored for security applications is also covered, enhancing students' abilities to automate tasks and analyze data in security contexts.

CY-104 CompTIA Security+ Professional Certificate

Prepares students for the CompTIA Security+ certification with a focus on security principles, threat identification, mitigation strategies, and security architecture and operations. It includes extensive exam preparation, covering network security, compliance, risk management, and cryptography. The unit is designed to build a strong foundation in managing and overseeing security programs, with practical application emphasized through various sprints.

CY-105 Cisco CCNA Professional Certificate

Guides students towards achieving the Cisco CCNA certification, providing both theoretical knowledge and practical networking skills. Topics covered include network fundamentals, routing, switching, network security, and hands-on experience with Cisco networking solutions. The unit also focuses on exam preparation, ensuring readiness for the Cisco CCNA certification. Subjects such as IP connectivity, automation, and programmability are also explored in depth.

CY-106 Microsoft Azure Administrator Associate Certificate

This unit prepares students for the AZ-104 Microsoft Azure Administrator certification. It covers Azure fundamentals, identity management, governance, virtual networking, and Azure security solutions. Hands-on experiences include managing Azure identities, implementing storage solutions, and managing virtual networks. The curriculum also focuses on automation with PowerShell and preparing for high availability and disaster recovery scenarios in Azure environments.

## Data Analyst

Hours: 1350 Clock Hours

Length: 9 Months

Description: The Data Analyst program is designed to provide students with a solid foundation in the field, focusing on the key concepts of data literacy, proficiency in data visualization, and the art of effective data communication. Upon completion, participants will have a strong understanding of fundamental data analysis principles, hands-on experience in creating compelling data visualizations, and the ability to convey data-driven insights effectively. This foundational phase not only prepares learners for advanced study in data analytics but also instills confidence in handling real-world data scenarios, laying the groundwork for a successful career in the dynamic and evolving field of data analytics.

Additionally, as part of the Data Analyst program students will be prepared to sit for and successfully pass two industry certification exams, further validating their skills and knowledge to future employers. The certifications include:

- Google Data Analytics
- Tableau certification

Masterschool's comprehensive preparation approach ensures that each student receives the support and resources needed to succeed and achieve their goals—both in the program and after graduation.

Objectives: Upon completion of this program, graduates will be able to:

- **Perform Data Visualization:** Create compelling and clear visualizations using tools like Excel and Tableau to effectively communicate data insights.
- **Analyze and Clean Data using SQL:** Utilize SQL to clean, preprocess, and analyze data, ensuring accuracy and consistency in datasets.
- **Construct and Execute SQL Queries:** Write efficient SQL queries to retrieve, combine, and manipulate data from various databases.
- **Demonstrate Data Storytelling Skills:** Use storytelling techniques to present data findings clearly, coherently, and persuasively.
- **Implement API Integration:** Integrate and utilize Application Programming Interfaces (APIs) for efficient data exchange and automation.
- **Gain Entry-Level Industry Roles:** Share a professional portfolio, nail job interviews, and start a career in the data industry.

Outline:

Course Number	Course Title	Theory Hours	Lab Hours
DA-101	Tech Foundations	110	30
DA-102	Excel, Tableau and Data Storytelling	125	50
DA-103	Advanced Tableau Techniques	125	50
DA-104	SQL Fundamentals	125	50
DA-105	SQL Expertise	125	50

DA-106	Introduction to Python	125	50
DA-107*	Role Based Learning: Data Science Foundations and Machine Learning	100	35
DA-108*	Role Based Learning: Advanced Data Science and Capstone Project	100	35
DA-109*	Role Based Learning: Data Analytics and Database Management	100	35
DA-110*	Role Based Learning: Business Intelligence and Capstone Project	100	35
DA-111	Project: SQL and Tableau	40	25
<b>Total Theory and Lab Hours</b>		<b>975</b>	<b>375</b>

*\*Students take either DA-107 and DA-108 for the Data Science career track or DA-109 and DA-110 for the Data Analytics & BI career track*

Course Descriptions:

DA-101 Tech Foundations

This unit introduces the basics of data, data analytics, and programming with Python. It covers forming analytical questions, communicating data insights, and time management. Key topics include an introduction to data literacy, problem-solving, and algorithmic thinking.

DA-102 Excel, Tableau and Data Storytelling

Focuses on data visualization skills using Excel and Tableau. Participants learn to tell compelling stories with data, create effective visualizations, and understand design principles for data presentation.

DA-103 Advanced Tableau Techniques

This unit delves into the advanced data visualization capabilities of Tableau. Participants will learn complex chart types, custom visualizations, interactive dashboard design, and advanced data calculations.

DA-104 SQL Fundamentals

Covers the essentials of SQL, including query structure, database types, and data manipulation. Participants learn to write SQL queries to retrieve, combine, and aggregate data, gaining a strong foundation in SQL for data analytics.

DA-105 SQL Expertise

Builds on SQL fundamentals, focusing on advanced SQL techniques for data cleaning, analysis, and handling complex queries. Topics include multiple joins, string functions, window functions, and using WITH statements and CTEs.

DA-106 Introduction to Python

Introduces Python programming, focusing on basic syntax, data structures, and the Pandas library for data analysis.



### ***Role Based Learning Electives: Data Science Track***

#### **DA-107 Data Science Foundations and Machine Learning**

Combines foundational data science skills with an introduction to machine learning. Participants learn essential data wrangling techniques, data cleaning, and exploratory data analysis (EDA) using Python. The course progresses to cover machine learning basics, including supervised and unsupervised learning, regression, classification, and clustering. Key learning outcomes include the ability to manipulate data with Python, build predictive models, and apply machine learning algorithms to solve real-world problems.

#### **DA-108 Advanced Data Science and Capstone Project**

Building on the foundational course, this advanced course delves into complex machine learning techniques such as deep learning, feature engineering, and model optimization. Participants will explore neural networks, ensemble methods, and advanced model evaluation strategies. The course culminates in a comprehensive capstone project where participants apply their skills to a real-world business challenge, developing a complete data science solution that demonstrates their expertise in data manipulation, machine learning, and model deployment.

### ***Role Based Learning Electives: Data Analytics and Business Intelligence Track***

#### **DA-109 Data Analytics and Database Management**

Provides a thorough grounding in data analytics and database management. Participants learn to design and create databases using SQL, focusing on relational database principles and data integrity. The course also covers advanced SQL techniques for complex data analysis and reporting. Key topics include data extraction, transformation, normalization, and performance optimization, preparing participants for roles in data management and analysis.

#### **DA-110 Business Intelligence and Capstone Project**

Combining advanced business intelligence (BI) skills with practical application, this course teaches participants to design and implement BI solutions, including dashboards and data visualizations using tools like Tableau and Power BI. The course emphasizes translating business needs into actionable insights and effective data storytelling. The capstone project challenges participants to create a full BI solution for a real-world scenario, showcasing their ability to manage data, create compelling visualizations, and provide strategic business recommendations.

#### **DA-111 Project SQL and Tableau**

A practical project unit where participants apply SQL and Tableau skills to real-world data analytics problems. This unit synthesizes learning from previous units and includes a career acceleration component to prepare participants for the job market with resume building and interview preparation.

### **Data Analyst - Advanced**

**Hours:** 2600 Clock Hours

**Length:** 18 Months

**Description:** The Data Analyst-Advanced program is designed to provide students with a solid foundation in the field, focusing on the key concepts of data literacy, proficiency in data visualization, and the art of effective data communication. Additionally, students in the Data Analyst Advanced will explore topics beyond the fundamentals, including Python and how it can be used in data cleaning and analysis,

machine learning, and data-driven decision-making. At the end of the program, students will complete a capstone project.

Upon completion, students will not only have a command of the basics of data analytics, they will have more advanced skills and knowledge that employers are seeking, laying the groundwork for a successful career in the dynamic and evolving field of data analytics.

Additionally, as part of the Data Analyst-Advanced program students will be prepared to sit for and successfully pass two industry certification exams, further validating their skills and knowledge to future employers. The certifications include:

- Google Data Analytics
- Tableau certification

Masterschool’s comprehensive preparation approach ensures that each student receives the support and resources needed to succeed and achieve their goals—both in the program and after graduation.

Objectives: Upon completion of this program, graduates will be able to:

- **Perform Data Visualization:** Create compelling and clear visualizations using tools like Excel and Tableau to effectively communicate data insights.
- **Analyze and Clean Data using SQL:** Utilize SQL to clean, preprocess, and analyze data, ensuring accuracy and consistency in datasets.
- **Analyze and Clean Data using Python:** Utilize Python to clean, preprocess, and analyze data, ensuring accuracy and consistency in datasets.
- **Construct and Execute SQL Queries:** Write efficient SQL queries to retrieve, combine, and manipulate data from various databases.
- **Describe Machine Learning Techniques:** Understand & implement supervised and unsupervised machine learning algorithms to analyze and predict data trends.
- **Conduct Exploratory Data Analysis (EDA):** Perform EDA to summarize main characteristics of data sets and uncover patterns using statistical techniques.
- **Demonstrate Data Storytelling Skills:** Use storytelling techniques to present data findings clearly, coherently, and persuasively.
- **Implement API Integration:** Integrate and utilize Application Programming Interfaces (APIs) for efficient data exchange and automation.
- **Gain Entry-Level Industry Roles:** Share a professional portfolio, nail job interviews, and start a career in the data industry.

Outline:

Course Number	Course Title	Theory Hours	Lab Hours
DA-101	Tech Foundations	150	50
DA-102	Excel, Tableau and Data Storytelling	125	50
DA-103	Advanced Tableau Techniques	125	50
DA-104	SQL Fundamentals	125	50
DA-105	SQL Expertise	125	50

DA-106	Introduction to Python	150	50
DA-112*	Role Based Learning: Data Wrangling and Analysis with Python	200	100
DA-113*	Role Based Learning: Machine Learning Foundations	200	100
DA-114*	Role Based Learning: Advanced Artificial Intelligence	200	100
DA-115*	Role Based Learning: Practical Data Toolset	200	100
DA-116*	Role Based Learning: Database Design and Creation	200	100
DA-117*	Role Based Learning: Dashboard Design and Creation	200	100
DA-118*	Role Based Learning: Practical Applications in Business Analytics	200	100
DA-119*	Role Based Learning: Practical Toolset	200	100
DA-120	Role Based Project	200	100
<b>Total Theory and Lab Hours</b>		<b>1800</b>	<b>800</b>

*\*Students take either DA-112, DA-113, DA-114, and DA-115 for the Data Science & AI career track or DA-117, DA-118, DA-119, and DA-120 for the Data Analytics & BI career track*

Course Descriptions:

DA-101 Tech Foundations

This unit introduces the basics of data, data analytics, and programming with Python. It covers forming analytical questions, communicating data insights, and time management. Key topics include an introduction to data literacy, problem-solving, and algorithmic thinking.

DA-102 Excel, Tableau and Data Storytelling

Focuses on data visualization skills using Excel and Tableau. Participants learn to tell compelling stories with data, create effective visualizations, and understand design principles for data presentation.

DA-103 Advanced Tableau Techniques

This unit delves into the advanced data visualization capabilities of Tableau. Participants will learn complex chart types, custom visualizations, interactive dashboard design, and advanced data calculations.

DA-104 SQL Fundamentals

Covers the essentials of SQL, including query structure, database types, and data manipulation. Participants learn to write SQL queries to retrieve, combine, and aggregate data, gaining a strong foundation in SQL for data analytics.

DA-105 SQL Expertise

Builds on SQL fundamentals, focusing on advanced SQL techniques for data cleaning, analysis, and handling complex queries. Topics include multiple joins, string functions, window functions, and using WITH statements and CTEs.

### DA-106 Introduction to Python

Introduces Python programming, focusing on basic syntax, data structures, and the Pandas library for data analysis.

### ***Role Based Learning Electives: Data Science and AI Track***

#### DA-112 Data Wrangling and Analysis with Python

This unit focuses on developing analytical thinking skills through practical data cleaning, preprocessing, and exploratory data analysis. Participants will learn to handle real-world datasets, apply descriptive statistics, and develop critical thinking skills to solve complex business problems. Key topics include data wrangling techniques, exploratory data analysis, and communicating data insights effectively.

#### DA-113 Machine Learning Foundations

Introduces the core concepts of machine learning, including supervised and unsupervised learning algorithms, feature engineering, and model evaluation. Participants will learn to optimize machine learning models and apply them to real-world data sets, covering essential techniques such as hyperparameter tuning and natural language processing (NLP).

#### DA-114 Advanced Artificial Intelligence

Delves into advanced AI topics like deep learning, image processing, time series analysis, and the use of large language models (LLMs) such as GPT. Participants will gain a deep understanding of neural networks, learn to process and interpret image data, and explore the applications of generative AI in creating new content based on existing data patterns.

#### DA-115 Practical Data Toolset

This unit equips participants with the tools and techniques required for efficient data management and automation. It covers the integration of APIs for data exchange, version control with Git, and the use of cloud computing platforms for scalable data solutions. Participants will learn to collaborate on complex codebases and leverage cloud infrastructure for data analytics.

### ***Role Based Learning Electives: Data Analytics and Business Intelligence Track***

#### DA-116 Database Design and Creation

Teaches the fundamentals of designing and building databases, from abstracting a business model into relational diagrams to implementing these designs in SQL. Participants will learn to code databases, apply constraints, and perform testing, ensuring a strong foundation in database management. The course also includes principles of data warehousing and the basics of cloud computing.

#### DA-117 Dashboard Design and Creation

Focuses on the principles of business intelligence (BI) and dashboard design, guiding participants through the steps of creating functional and visually appealing dashboards based on real-world business needs. Topics covered include understanding stakeholder requirements, designing effective visualizations, and developing interactive BI dashboards using tools like Tableau and Power BI.

#### DA-118 Practical Applications in Business Analytics

This unit emphasizes effective data analysis, interpretation, and presentation skills. Participants will learn to apply statistical methods, craft compelling reports, and tell impactful data-driven stories. The course also covers business domain knowledge and data storytelling techniques to ensure that analytics findings are relevant and actionable for business stakeholders.

### DA-119 Practical Toolset

Enhances project management skills using agile methodologies, specifically the Scrum framework, and introduces prompt engineering techniques to optimize workflows. Participants will learn to manage complex data projects efficiently, adapt to changing demands, and deliver impactful insights in dynamic, data-centric roles.

### DA-120 Role Based Project

A practical project unit where participants apply all RBL skills to real-world problems and functions. This unit synthesizes learning from previous units and includes a career acceleration component to prepare participants for the job market with resume building and interview preparation.

## **Software Engineering**

Hours: 1350 Clock Hours

Length: 9 Months

Description: The Software Engineering program is a comprehensive 9-month, online offering designed to provide participants with the foundational skills and competencies required to begin careers in software development. This program emphasizes achieving mastery of core programming principles using Python and introduces advanced technologies through practical, hands-on projects that simulate real-world challenges. The program culminates in a rigorous career preparation module that enhances job readiness with resume building, interview preparation, and portfolio building. Masterschool's program aligns with current industry needs, ensuring that participants are well-prepared to meet the demands of today's tech job market while fostering adaptability for future technological advancements.

Additionally, as part of the Software Engineering program students will be prepared to sit for and successfully pass industry certification exams, further validating their skills and knowledge to future employers. The certifications include:

- PCEP™ – Certified Entry-Level Python Programmer
- PCAP™ – Certified Associate Python Programmer
- AWS Certified Cloud Practitioner (optional)
- AWS Certified Developer - Associate (optional)

Masterschool's comprehensive preparation approach ensures that each student receives the support and resources needed to succeed and achieve their goals—both in the program and after graduation.

Objectives: Upon completion of this program, graduates will be able to:

- **Develop Software Solutions:** Apply fundamental and advanced programming concepts using languages such as Python and JavaScript to design, develop, and maintain robust software applications.
- **Use Web Technologies:** Demonstrate proficiency in web development, including understanding HTTP protocols, and creating dynamic web applications using HTML, CSS, and modern frameworks like Flask and React.
- **Manage Databases:** Design and interact with databases using SQL, and integrate databases with web applications to manage data effectively using Python.

- **Implement Best Practices:** Employ best coding practices, including version control with Git, writing clean and maintainable code, and performing comprehensive testing with tools like pytest.
- **Engage in Advanced Software methodologies:** Gain practical experience in advanced software development techniques including asynchronous programming, cloud deployment, and utilizing containerization technologies like Docker to prepare for complex project requirements and high-tech environments.
- **Enter the Job Market:** Show essential career skills, share a professional portfolio, nail technical interviews, and leverage a personal brand on platforms like LinkedIn and GitHub to gain employment in the software engineering field.

Course Outline:

Course Number	Course Title	Theory Hours	Lab Hours
SE-101	Tech Fundamentals	50	25
SE 102	Intermediate Python	75	25
SE-103	Proficient Python	75	25
SE-104	Intro to Web	100	50
SE-105	Object Oriented Programming & Back End	100	50
SE-106	Databases & JavaScript	175	50
SE-107*	Role-Based Learning: API Development and Databases	175	50
SE-108*	Role-Based Learning: Cloud Deployment and Security	175	50
SE-109*	Role-Based Learning: Frontend Fundamentals	175	50
SE-110*	Role-Based Learning: React and Modern Frontend Development	175	50
SE-111*	Role-Based Learning: Foundations of AI and Backend Integration	175	50
SE-112*	Role-Based Learning: AI Model Integration and Deployment	175	50
SE-113*	Role-Based Learning: Fundamentals of Testing	175	50
SE-114*	Role-Based Learning: Test Tools, Techniques, and ISTQB® Exam Preparation	175	50
SE-115	Career Acceleration	75	25
<b>Total Theory and Lab Hours</b>		<b>1000</b>	<b>350</b>

*\*Students take either SE-107 and SE-108 for the Backend Engineering career track, SE-109 and SE-110 for the Frontend Engineering career track, SE-111 and SE-112 for the AI Engineering career track, or SE-113 and SE-114 for the QA Engineering career track*

Course Descriptions:

SE-101 Tech Foundations

This unit lays the groundwork with the fundamentals needed for any career in tech. Participants learn the basics of programming with Python, understand how the internet works, begin to practice algorithmic thinking and complete their first projects. The unit also focuses on motivation, featuring talks from industry experts and Masterschool graduates about the rewarding career that awaits at the end of the journey.

#### SE-102 Intermediate Python

This unit offers a deep dive into the Python programming language. Participants will learn about new data structures, loops, and how to break down a big problem into smaller units using functions. The unit also introduces the setup and use of the offline workspace with PyCharm and the Python Interactive Shell.

#### SE-103 Advanced Python

This unit involves building the first piece of a dynamic training-long project. It focuses on best practices for creating clean, well-documented code, and maintaining version control with Git. Later in the unit, participants learn to use Python for reading files and creating complex data structures.

#### SE-104 Intro to Web

This unit teaches how the web works, focusing on the basic building blocks like HTTP protocol, HTML, and CSS. Participants will also learn how to use Python to access online sources and APIs, analyze the data, and extract useful information.

#### SE 105 Object Oriented Programming & Backend

This unit introduces the programming paradigm of Object Oriented Programming and covers Unit Testing with the "pytest" library, emphasizing the foundational principles of this paradigm.

#### SE 106 Databases & JavaScript

This unit provides a dual focus on backend and frontend development. Participants will start by mastering the fundamentals of Relational Database Design and SQL, including designing databases, querying them with Python, and integrating them into web applications. The unit then shifts to frontend development, introducing JavaScript as a second programming language. Participants learn to manipulate the DOM using JavaScript within HTML files and explore Async functions, essential for modern frontend development.

### ***Role Based Learning Electives: Backend Engineering Track***

#### SE-107 API Development and Databases

This unit focuses on the fundamental skills required for backend development in software engineering. Participants will learn how to develop robust APIs using frameworks like FastAPI and Flask. The unit also covers Relational Database Management with PostgreSQL, teaching participants how to design, query, and connect databases to applications. Additionally, participants will gain knowledge in implementing secure user Authentication methods, ensuring that their applications are safe and reliable.

#### SE-108 Cloud Deployment and Security

This unit builds upon foundational software engineering skills by introducing Data Validation and Sanitization techniques to ensure data integrity and security within applications. Participants will explore Cloud App Deployment using platforms like Vercel and Render and learn the essentials of deploying scalable applications. The unit also emphasizes Unit Testing for software reliability and teaches

Authentication using JWT (JSON Web Tokens) to secure user sessions. Participants will learn to automate deployment workflows using GitHub Actions, ensuring efficient and continuous delivery of applications.

### ***Role Based Learning Electives: Frontend Engineering Track***

#### **SE-109 Frontend Fundamentals**

This unit builds foundational skills in frontend development, focusing on key concepts and tools. Participants will dive into Advanced CSS techniques, including responsive design and media queries, to create visually appealing and adaptable web pages. The unit covers essential JavaScript Syntax and Basics, including the use of Promises, async, await for asynchronous programming. Participants learn to manipulate the DOM with JavaScript, handle errors effectively, and utilize AJAX and Fetch API for data retrieval. Additionally, the unit introduces LocalStorage for maintaining state on the client side.

#### **SE-110 React and Modern Frontend Development**

This unit introduces participants to React, a powerful library for building user interfaces, and covers essential concepts in modern frontend development. Key topics include using Styling Frameworks like Tailwind and MUI for efficient and scalable CSS, and mastering Form Handling to manage user input. The unit also covers State Management using useState and useEffect, as well as using the Context API for managing global state. Participants will learn to implement client-side routing with React Router to build dynamic, single-page applications.

### ***Role Based Learning Electives: AI Engineering Track***

#### **SE-111 Foundations of AI and Backend Integration**

This unit introduces the fundamentals of Artificial Intelligence (AI), Machine Learning (ML), and Large Language Models (LLMs), providing a strong foundation in the core concepts and technologies driving the AI industry. Participants will learn about the current market leaders in AI and understand the differences between them, gaining insights into various AI technologies. The unit also covers Prompt Engineering for effective interaction with LLMs and focuses on essential skills such as Data Preprocessing and Cleaning to prepare datasets for AI and ML applications. Participants will gain hands-on experience with backend frameworks like FastAPI and Flask for building APIs and will learn to integrate with the OpenAI API. The course also includes working with PostgreSQL Databases for data storage and management.

#### **SE-112 AI Model Integration and Deployment**

This unit focuses on the practical application of integrating AI models with backend systems. Participants will learn the intricacies of API Integration with AI Models, enabling them to incorporate advanced AI capabilities into their applications. The unit covers Persistent Context Management to maintain conversational context in AI-driven applications and Structured Output with JSON to format AI responses effectively. Participants will also gain skills in Basic Cloud App Deployment, providing a foundation for deploying AI-powered applications to the cloud for scalability and reliability.

### ***Role Based Learning Electives: QA Engineer Track***

#### **SE-113 Fundamentals of Testing**

This unit covers the core principles of software testing within the Software Development Life Cycle (SDLC). Participants will explore static testing methods, including reviews and inspections, and learn to analyze and design effective tests. The course also delves into managing test activities, focusing on planning, monitoring, and controlling test processes to ensure quality and efficiency.



### SE-114 Test Tools, Techniques, and ISTQB® Exam Preparation

This unit covers essential test design techniques, including Blackbox and Whitebox Testing, and provides practical experience with test tools like Postman for API testing. It also prepares participants for the ISTQB® Certified Tester Foundation Level Exam with comprehensive content reviews and practice exams, equipping them with the knowledge and skills to excel in professional testing environments.

### SE-115 Career Acceleration

This unit is dedicated to preparing participants for their first full-time Software Engineering role. It covers essential job-hunting skills, including how to get hired at a top tech company, and continues the development of technical and soft skills to make participants ideal candidates for their targeted roles.

## **Software Engineering - Advanced**

Hours: 2600 Clock Hours

Length: 18 Months

Description: The Software Engineering – Advanced program is an intensive 18-month, online offering designed to provide participants with foundational skills and advanced techniques necessary to excel in the software engineering field. Through a curriculum that emphasizes hands-on experience and real-world application, students will be exposed to a wide range of technologies and programming languages, including Python, Java, JavaScript, and React, among others. This program focuses on comprehensive training in tech fundamentals, web applications, databases, and advanced programming, all framed within the industry's best practices for software development. Upon completion, participants will not only have a profound understanding of coding and application development but also possess the capabilities to adapt to emerging technologies and tackle complex software challenges effectively. This program is tailored for individuals aiming to transform their ideas into innovative solutions and aspire to become pivotal contributors to the digital landscape.

Additionally, as part of the Software Engineering - Advanced program students will be prepared to sit for and successfully pass industry certification exams, further validating their skills and knowledge to future employers. The certifications include:

- PCEP™ – Certified Entry-Level Python Programmer
- PCAP™ – Certified Associate Python Programmer
- AWS Certified Cloud Practitioner (optional)
- AWS Certified Developer - Associate (optional)

Masterschool's comprehensive preparation approach ensures that each student receives the support and resources needed to succeed and achieve their goals—both in the program and after graduation.

Objectives: Upon completion of this program, graduates will be able to:

- **Apply Core Programming Concepts:** Understand and apply fundamental programming principles using Python, ensuring a solid foundation in coding and software development.
- **Utilize Advanced Technologies:** Employ advanced software technologies and frameworks to build complex, real-world applications, demonstrating proficiency in both front-end and back-end development.

- **Develop Practical Solutions:** Translate theoretical knowledge into practical solutions by engaging in hands-on projects that mimic industry challenges and require innovative problem-solving.
- **Implement Effective Coding Practices:** Write clean, maintainable, and efficient code using industry best practices, including version control and documentation, to ensure high-quality software development.
- **Conduct Comprehensive Testing:** Apply rigorous testing methodologies to ensure software functionality and reliability through unit testing and debugging.
- **Manage Software Projects:** Demonstrate competence in project management, from planning through execution, using tools and strategies that enhance collaboration and efficiency.
- **Create Dynamic Web Applications:** Build dynamic web applications using modern frameworks and technologies, including Flask for server-side development and JavaScript for client-side functionality.
- **Interact with Databases:** Design and manage databases using SQL and implement data interactions within applications using ORM tools like SQLAlchemy.
- **Perform Data Manipulation and Analysis:** Analyze and manipulate data effectively using Python libraries and tools, contributing to data-driven decision-making processes.
- **Enter the Tech Industry Job Market:** Leverage essential job-hunting skills, from crafting an effective resume and online profile to excelling in technical interviews and networking.
- **Gain Industry Certifications:** Sit for and pass industry-recognized certifications that validate technical skills and enhance employability in the tech sector.

Course Outline:

Course Number	Course Title	Theory Hours	Lab Hours
SE-101	Tech Fundamentals	50	25
SE 102	Intermediate Python	75	25
SE 103	Proficient Python	75	25
SE 104	Intro to Web	100	50
SE 105	Object Oriented Programming & Back-end	100	75
SE-106	Databases & JavaScript	275	125
SE-116*	Role-Based Learning: API Development and Databases	275	125
SE-117*	Role-Based Learning: Cloud Deployment and Security	275	125
SE-118*	Role-Based Learning: API Enhancement and Automation	275	125
SE-119*	Role-Based Learning: Advanced Cloud and Serverless Computing	275	125
SE-120*	Role-Based Learning: Frontend Fundamentals	275	125
SE-121*	Role-Based Learning: React and Modern Frontend Development	275	125
SE-122*	Role-Based Learning: State Management and Deployment	275	125

SE-123*	Role-Based Learning: Advanced Frontend Techniques and Security	275	125
SE-124*	Role-Based Learning: Foundations of AI and Backend Integration	275	125
SE-125*	Role-Based Learning: AI Model Integration and Deployment	275	125
SE-126*	Role-Based Learning: AI Frameworks and Optimization	275	125
SE-127*	Role-Based Learning: AI Operations and Security	275	125
SE-128	Role-Based Learning: Fundamentals of Testing	275	125
SE-129	Role-Based Learning: Test Tools and Techniques	275	125
SE-130	Role-Based Learning: ISTQB® Certified Tester Foundation Level Exam Preparation	275	125
SE-131	Role-Based Learning: Test Automation with Selenium & Python	275	125
<b>Total Theory and Lab Hours</b>		<b>1775</b>	<b>825</b>

*\*Students take either SE-116, SE-117, SE-118, and SE-119 for the Backend Engineering career track, SE-120, SE-121, SE-122, and SE-123 for the Frontend Engineering career track, SE-124, SE-125, SE-126, and SE-127 for the AI Engineering career track, or SE-128, SE-129, SE-1130, and SE-131 for the QA Engineering career track*

#### Course Descriptions:

##### SE 101 Tech Fundamentals

This unit lays the groundwork with the fundamentals needed for any career in tech. Participants learn the basics of programming with Python, understand how the internet works, begin to practice algorithmic thinking and complete their first projects. The unit also focuses on motivation, featuring talks from industry experts and Masterschool graduates about the rewarding career that awaits at the end of the journey.

##### SE 102 Intermediate Python

This unit offers a deep dive into the Python programming language. Participants will learn about new data structures, loops, and how to break down a big problem into smaller units using functions. The unit also introduces the setup and use of the offline workspace with PyCharm and the Python Interactive Shell.

##### SE 103 Proficient Python

This unit involves building the first piece of a dynamic training-long project. It focuses on best practices for creating clean, well-documented code, and maintaining version control with Git. Later in the unit, participants learn to use Python for reading files and creating complex data structures.

##### SE 104 Intro to Web

This unit teaches how the web works, focusing on the basic building blocks like HTTP protocol, HTML, and CSS. Participants will also learn how to use Python to access online sources and APIs, analyze the data, and extract useful information.

### SE 105 Object Oriented Programming & Backend

This unit introduces the programming paradigm of Object Oriented Programming and covers Unit Testing with the "pytest" library, emphasizing the foundational principles of this paradigm.

### SE 106 Databases & JavaScript

This unit provides a dual focus on backend and frontend development. Participants will start by mastering the fundamentals of Relational Database Design and SQL, including designing databases, querying them with Python, and integrating them into web applications. The unit then shifts to frontend development, introducing JavaScript as a second programming language. Participants learn to manipulate the DOM using JavaScript within HTML files and explore Async functions, essential for modern frontend development.

### ***Role Based Learning Electives: Backend Engineering Track***

#### SE-116 API Development and Databases

This unit focuses on the fundamental skills required for backend development in software engineering. Participants will learn how to develop robust APIs using frameworks like FastAPI and Flask. The unit also covers Relational Database Management with PostgreSQL, teaching participants how to design, query, and connect databases to applications. Additionally, participants will gain knowledge in implementing secure user Authentication methods, ensuring that their applications are safe and reliable.

#### SE-117 Cloud Deployment and Security

This unit builds upon foundational software engineering skills by introducing Data Validation and Sanitization techniques to ensure data integrity and security within applications. Participants will explore Cloud App Deployment using platforms like Vercel and Render and learn the essentials of deploying scalable applications. The unit also emphasizes Unit Testing for software reliability and teaches Authentication using JWT (JSON Web Tokens) to secure user sessions. Participants will learn to automate deployment workflows using GitHub Actions, ensuring efficient and continuous delivery of applications.

#### SE-118 API Enhancement and Automation

This advanced unit focuses on enhancing API functionality and backend automation skills. Participants will learn to document and test APIs using Swagger, manage background tasks with Cron Jobs, and conduct thorough Server Side Tests to ensure robustness. The course also explores integrating Generative AI (GenAI) APIs to add intelligent features to applications. This unit prepares participants to handle complex backend operations and introduces advanced automation techniques for modern software development.

#### SE-119 Advanced Cloud and Serverless Computing

In this unit, participants dive deeper into Cloud and Serverless Computing. The course covers deploying and managing serverless functions using Cloud Lambda services, such as AWS Lambda. Participants will also learn to implement authentication solutions using Cognito, Firebase, or Auth0 for secure user management. The unit covers scheduling events in the cloud and executing Lambda Functions for efficient resource management. Additionally, participants will utilize Husky with Sphinx and Pylint for code linting and documentation, ensuring high code quality and maintainability.

### ***Role Based Learning Electives: Frontend Engineering Track***

#### SE-120 Frontend Fundamentals

This unit builds foundational skills in frontend development, focusing on key concepts and tools. Participants will dive into Advanced CSS techniques, including responsive design and media queries, to

create visually appealing and adaptable web pages. The unit covers essential JavaScript Syntax and Basics, including the use of Promises, async, await for asynchronous programming. Participants learn to manipulate the DOM with JavaScript, handle errors effectively, and utilize AJAX and Fetch API for data retrieval. Additionally, the unit introduces LocalStorage for maintaining state on the client side.

#### SE-121 React and Modern Frontend Development

This unit introduces participants to React, a powerful library for building user interfaces, and covers essential concepts in modern frontend development. Key topics include using Styling Frameworks like Tailwind and MUI for efficient and scalable CSS, and mastering Form Handling to manage user input. The unit also covers State Management using useState and useEffect, as well as using the Context API for managing global state. Participants will learn to implement client-side routing with React Router to build dynamic, single-page applications.

#### SE-122 State Management and Deployment

This unit delves deeper into advanced frontend development tools and techniques. Participants will learn to use state-management libraries like Zustand or Redux Toolkit to manage complex application states. The course covers form validation using popular libraries such as React Forms, Formik, Yup, and Zod. Participants will also explore React Query for efficient server-state management and caching. The unit concludes with practical skills in App Cloud Deployment using platforms like Render or Vercel, providing a hands-on experience in deploying cloud-based applications.

#### SE-123 Advanced Frontend Techniques and Security

This advanced unit focuses on enhancing participants' skills in frontend development and application security. The course covers TypeScript, including the use of types and interfaces for building robust and maintainable code. Participants will learn Component Testing techniques and Security Best Practices to protect web applications. The unit includes hands-on experience with Testing using Jest and Testing Library, Husky Automation for efficient code management, and Authentication with JWT for secure user management. Additionally, participants will learn to build and integrate APIs using Flask or FastAPI, and manage server-state and caching with React Query for high-performance applications.

### ***Role Based Learning Electives: AI Engineering Track***

#### SE-124 Foundations of AI and Backend Integration

This unit introduces the fundamentals of Artificial Intelligence (AI), Machine Learning (ML), and Large Language Models (LLMs), providing a strong foundation in the core concepts and technologies driving the AI industry. Participants will learn about the current market leaders in AI and understand the differences between them, gaining insights into various AI technologies. The unit also covers Prompt Engineering for effective interaction with LLMs and focuses on essential skills such as Data Preprocessing and Cleaning to prepare datasets for AI and ML applications. Participants will gain hands-on experience with backend frameworks like FastAPI and Flask for building APIs and will learn to integrate with the OpenAI API. The course also includes working with PostgreSQL Databases for data storage and management.

#### SE-125 AI Model Integration and Deployment

This unit focuses on the practical application of integrating AI models with backend systems. Participants will learn the intricacies of API Integration with AI Models, enabling them to incorporate advanced AI capabilities into their applications. The unit covers Persistent Context Management to maintain conversational context in AI-driven applications and Structured Output with JSON to format AI responses

effectively. Participants will also gain skills in Basic Cloud App Deployment, providing a foundation for deploying AI-powered applications to the cloud for scalability and reliability.

#### SE-126 AI Frameworks and Optimization

This advanced unit delves deeper into specialized tools and frameworks for building AI applications. Participants will explore Langchain, a powerful framework for creating AI applications with modular components. The course covers the use of Streams to handle real-time data processing and introduces techniques for Token Optimization to maximize efficiency and reduce costs in AI model usage. This unit is designed to equip participants with the skills needed to optimize and scale AI applications effectively.

#### SE-127 AI Operations and Security

In this advanced unit, participants will focus on operational and security aspects of AI-powered applications. The course includes managing scheduled tasks with Cronjobs, enabling automated operations within applications. Participants will learn about Text Embeddings, a crucial technique for transforming text data into machine-readable formats for AI models. The unit also emphasizes Authentication with JWT to secure user sessions in AI-driven applications, ensuring robust security practices. Additionally, participants will gain hands-on experience in managing API security and integrating AI functionalities with secure authentication protocols.

### ***Role Based Learning Electives: QA Engineer Track***

#### SE-128 Fundamentals of Testing

This unit covers the core principles of software testing within the Software Development Life Cycle (SDLC). Participants will explore static testing methods, including reviews and inspections, and learn to analyze and design effective tests. The course also delves into managing test activities, focusing on planning, monitoring, and controlling test processes to ensure quality and efficiency.

#### SE-129 Test Tools and Techniques

This unit provides hands-on experience with various testing tools and techniques. Participants will learn about different test design techniques such as Blackbox Testing and Whitebox Testing. The course offers practical insights into setting up test environments, executing tests, and reporting outcomes. Additionally, it includes API testing with Postman, equipping learners with the skills to handle API validation and performance testing.

#### SE-130 ISTQB® Certified Tester Foundation Level Exam Preparation

This unit is designed to prepare participants for the ISTQB® Certified Tester Foundation Level Exam. It covers all the essential topics required for certification, including fundamental testing principles, test management, test design techniques, and tools. The course includes comprehensive review sessions and practice exams to help learners achieve certification successfully.

#### SE-131 Test Automation with Selenium & Python

This advanced unit focuses on test automation techniques using Selenium and Python. Participants will learn how to automate web applications testing, utilize advanced testing frameworks, and perform API testing with Postman. The unit also explores integrating test automation into Continuous Integration/Continuous Deployment (CI/CD) pipelines, enabling participants to enhance their automated testing capabilities and streamline the development process.

## TUITION AND FEES

### Cybersecurity Analyst, Data Analyst, and Software Engineering programs

#### Program Costs

Registration Fee.....	\$125.00
Books and Supplies.....	Included
<u>Tuition.....</u>	<u>\$21,375.00</u>
Total Cost	\$21,500.00

### Cybersecurity Analyst-Advanced, Data Analyst-Advanced, and Software Engineering-Advanced programs

#### Program Costs

Registration Fee.....	\$125.00
Books and Supplies.....	Included
<u>Tuition.....</u>	<u>\$44,875.00</u>
Total Cost	\$45,000.00

### Books, Supplies, and Equipment

All books, supplies, and equipment needed are included in the price of tuition. All materials used during the program are available to the students online. Masterschool will provide materials directly to students or provide information to access materials, if applicable, as students move through their programs.

No additional books or supplies are required for the program.

## PAYMENT OPTIONS

Students have the option to pay for their program in full at the time of enrollment. Masterschool also offers a payment plan and deferred fixed monthly payments. Payment can be made by credit card, ACH, or e-check.

Non-payment of any outstanding financial obligations over 60 days past due may result in termination (if the student is still enrolled) and/or the student's account being sent to collections.

## INSTITUTIONAL SCHOLARSHIPS AND GRANTS

Masterschool periodically offers grants to support specific groups of students. These grants, offered as tuition credits, are designed to provide financial assistance and encourage educational opportunities for eligible students. To learn more about available grants and eligibility criteria, please contact us at [hey@masterschool.com](mailto:hey@masterschool.com) for the most up-to-date information.

Masterschool does not offer any institutional scholarships.

## **CANCELLATION POLICY**

Students may choose to withdraw from the course at any time and for any reason. Students are requested, but not required, to notify the School Director or designated school official in writing if they are withdrawing from the school by sending an email to [hey@masterschool.com](mailto:hey@masterschool.com) or by contacting the School Director. Refunds will be issued to students per the refund policy outlined in this catalog.

A student will be academically withdrawn from the course if the student fails to maintain the minimum course progress requirements stated in this catalog. Refunds will be issued to students who are academically withdrawn per the refund policy outlined in this catalog.

Masterschool reserves the right to terminate any student at any time for violations of its policies, regulations, or codes of conduct. Non-payment of any outstanding financial obligations over 60 days past due may also result in termination.

## **REFUND POLICY**

If the student is not accepted into the training program, all monies paid by the student shall be refunded. Refunds for books, supplies, and consumable fees shall be made in accordance with Ohio Administrative Code section 3332-1-10.1. Please see the enrollment agreement for the terms in each program. Refunds for tuition and refundable fees shall be made in accordance with the following provisions as established by Ohio Administrative Code section 3332-1-10:

(1) A student who withdraws before the first class and after the 5-day cancellation period shall be obligated for the registration fee.

(2) A student who starts class and withdraws before the academic term is 15% completed will be obligated for 25% of the tuition and refundable fees plus the registration fee.

(3) A student who starts class and withdraws after the academic term is 15% but before the academic term is 25% completed will be obligated for 50% of the tuition and refundable fees plus the registration fee.

(4) A student who starts class and withdraws after the academic term is 25% complete but before the academic term is 40% completed will be obligated for 75% of the tuition and refundable fees plus the registration fee.

(5) A student who starts class and withdraws after the academic term is 40% completed will not be entitled to a refund of the tuition and fees.

The School shall make the appropriate refund within thirty (30) days of the date the School is able to determine that a student has withdrawn or has been terminated from a program. Refunds shall be based upon the last date of a student's attendance or participation in an academic school activity.



## FACULTY

### Cybersecurity Faculty

Instructor Name	Program(s) Taught	Educational Attainment	Institution & Year achieved
Itamar Shalev	Cybersecurity Analyst; Cybersecurity Analyst - Advanced	BSC Political Science and Government  Cyber Management Diploma	Bar-Ilan University  Technion - Israel Institute of Technology
James Allman-Talbot	Cybersecurity Analyst; Cybersecurity Analyst - Advanced	MSc, Information Security	University of London, 2011
Chris Powell	Cybersecurity Analyst; Cybersecurity Analyst - Advanced	BSC (HONS) - COMPUTER NETWORKS AND SECURITY	Birmingham City University, 2010
Dave McClennon	Cybersecurity Analyst; Cybersecurity Analyst - Advanced	Cisco Certified Network Associate Certified Ethical Hacker	Cisco, 2010
Dr. Mohammadreza Ashouri	Cybersecurity Analyst; Cybersecurity Analyst - Advanced	PhD, Computer Software Engineering	University of Potsdam, 2020
Hristiyan Lazarov	Cybersecurity Analyst; Cybersecurity Analyst - Advanced	BS, Computer Technology  Network Forensic Analyst	UNIBIT, 2014  GIAC, 2019
Lukas V.	Cybersecurity Analyst; Cybersecurity Analyst - Advanced	BS, Data Science  Udacity Nanodegree, ML Engineer	IU International University of Applied Sciences, 2023  Udacity, 2021

**Data Analyst Faculty**

Instructor Name	Program(s) Taught	Educational Attainment	Institution & Year achieved
Deborah Gabisson	Data Analyst; Data Analyst - Advanced	Master's degree, Statistics  Double degree in Computer Engineering and Mathematics	Universidad de Granada, 2021  Monash University, 2014
Thimo Wellner	Data Analyst; Data Analyst - Advanced	MS, Bioinformatics  BS, Bioinformatics	Freie Universität Berlin, 2020  Izmir Institute of Technology, 2016
Katerina Arsh	Data Analyst; Data Analyst - Advanced	Master's degree, Development Economics & International Studies  Bachelor's degree, International Business	FAU Erlangen-Nürnberg, 2018  Peter the Great St. Petersburg Polytechnic University, 2014
Lidija Haller	Data Analyst; Data Analyst - Advanced	Master's Degree, Data Science  Bachelor's Degree, Business Information Systems	Vilnius Gediminas Technical University, 2016 & 2018

### Software Engineering Faculty

Instructor Name	Program(s) Taught	Educational Attainment	Institution & Year achieved
Alon Gal	Software Engineering; Software Engineering - Advanced	Bachelor's degree, Psychology and Education	Ben-Gurion University of the Negev, 2013
Charles Effiong, PhD	Software Engineering; Software Engineering - Advanced	Ph.D. Systems Automation & Microelectronics  Master's, ICT - Embedded Systems  BSc, Computer Science	University of Montpellier, 2017  University of Western Brittany, 2014  University of Greenwich, 2012
Russell Snyder	Software Engineering; Software Engineering - Advanced	Master's Degree, Digital Composition & Performance  Certificate of Completion, Javascript Frameworks, Modern Web Development	The University of Edinburgh, 2014  Angular Bootcamp, 2016
Maria Soler	Software Engineering; Software Engineering - Advanced	Bachelor's Degree, Computer Science  Web Development	International University of Applied Sciences, 2025  Codaisseur, 2021