

Masters of Science in Computer Science

Innovative degree programs in Software Engineering, Full Stack Development, and AI/Machine Learning.



Qwasar Silicon Valley

About Us **Our Mission**

Training Millions for the Digital World

Delivering on-the-job readiness by training to Silicon Valley tech standards is our passion. Our curriculum is aligned with current job requirements and employer demands to increase job placement rates. Our programs are entirely skills-based and competency-based to get students in today's tech jobs.

Qwasar Silicon Valley is an innovative training services provider focused on software-related education. We have 20+ years of experience in advanced software engineering education, and our founding team and work has won 3 international educational awards.

Qwasar is on a mission to train millions for the digital world and to make education accessible. We partner with companies, organizations, cities, governments, and colleges to create strong opportunities for anyone to get into the tech industry.



Two Decades in Innovative Education

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21st Century Skill Development

Both hard and soft skills are developed for today's jobs. Cloud engineering and DevOps focus on infrastructure, monitoring, and automation.

Learning Science

Combining active learning, project-based learning, and competency-based learning for an outstanding curriculum.





Silicon Valley Standards

We're one of the only programs globally to train to a high level that Tier 1 tech companies demand, from technical skills to soft skills to technical portfolios and more.

A Modern Masters in Computer Science



Skills-based programs focused on employment.

Our programs focus on obtaining and training the skills to set them apart from other candidates. With skills-based learning, the entire curriculum is centered and developed around the in-demand skills that employers are looking for. There are six different specialties to choose from within Qwasar that each offer a variety of projects and topics in a track. Each program begins with a pre-season involving basic software engineering principles, variables, functions, loop statements, if statements, basic algorithms and data structures, with an emphasis on Javascript, IDE, and Terminal.



More Coding, Less Lectures

Software engineers on the job are expected to solve problems, write code, collaborate, do code reviews, design architecture, debug, and ultimately deliver software that works. This is how our program is built, which is VERY different from a traditional program focused on lectures, grades, and passing - things that don't reflect on-the-job skills or keys to success.

North America's First Modern Masters in Computer Science

No other MSCS degree program in North America uses modern learning approaches or learning science and techniques that truly develop on-the-job skills needed in today's world. Most universities depend on their brand name, but don't actually teach you the skills you'll need to succeed on the job.

One Masters, 3 Areas of Specializations

Full Stack Development Software Engineering

Al/Machine Learning







Two **Options:**

FULL-TIME

Monday to Friday 40-50 hours per week

Train to Silicon Valley Standards.

The demand for tech talent is larger than ever and employers want the best of the best. We are a program that trains to the highest level of Silicon Valley standards. We make sure our graduates are equipped with all of the skills and competencies necessary for success in the 21st century. We provide skills-

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PART-TIMF

Evening and Weekend 15-20 hours per week

based training options to meet the needs of employer demands. Our students have the option to complete any of the specializations based on their desire.

Faculty Profiles Deans and Program Managers

Our program managers are trained to facilitate learning within our cohorts. Here's a little bit about our program managers:

Gaetan Juvin

Saetan is also a serial entrepreneur and co-founder of Qwasar. He has an extensive background in software engineering, learning science, business, AI, and le co-founded an AI startup that was bought by SAP in 2018 and was the first employee of 42 in Paris as well as the founding team of 42 Silicon alley. Gaetan designed and built 2 programs in California that had significant impact on student employment rates and high schooler AP exam success rates. Currently, his focus is on expanding the Qwasar platform and building the next generation of learning, working, and recruitment platforms using today's technologies. He is passionate about the environment, nature, Corsica, automation, and ethics in AI.



Kwame Yamgnane

Kwame is a serial entrepreneur and co-founder based in Berkley, CA. Prior to founding Qwasar, Kwame was the co-founder and Managing Director of 42 Silicon Valley and co-founder of 42 in Paris. 42 is a computer programming school that reached international acclaim. Kwame opened both campuses and helped 12 other campuses around the world. Kwame led growth, expansion, and operations at Epitech, France's leading private IT university and has a deep industry background, having worked with the national police force, France's distinguished sailing team, and top tier tech companies in France. Currently, his ocus is on expanding new technologies and innovations in education to the Americas, Africa, and Asia, with a focus on digital economy workforce and skill



Houssein Ahssimi

loussein is a passionate geek who uses his skills on projects that have a strong impact on the communities. He develops some apps such as YALI Learns App where ou can take free courses on entrepreneurship, good governance, women's rights, and public administration management. Recently he builds the curriculum and the platform of Niger First school with a focus on programming. His impact on the communities he served has naturally enabled him to win several national and onal competitions. Houssein is an alumnus of Mandela Washington Fellowship, a prestigious program of the former President of the United State, Barack Obama. One of the strengths that Houssein defined for our company is improvement through iteration. This is not unique to startup philosophies but we have never worked with anyone who embodies the dedication to it as Houssein does. His lack of ego and dedication to teaching and documentation means that lessons he learns will always be share out to his peers



Josh Trujillo

Josh is a Program Manager at Qwasar and is based in Seattle, WA. He has an extensive background across the technology industry working in startups focused n healthcare, co-working, entrepreneurship and education. Prior to Qwasar, Josh worked at Galvanize where he focused on building entrepreneurship ducation and mentorship programs. During this time he helped lead efforts to organize the nationwide team and establish virtual startup programming. Prior o his time at Galvanize, Josh worked at 42 Silicon Valley where he helped create and grow an incubator on campus. He also previously co-founded a HealthTech startup where he focused on lowering the cost of preventative healthcare. At Qwasar, Josh is focused on managing our US based programs and ensuring our students have the top-level skills needed to have a successful career in tech!



John Jepsen

John is a Technical Program Manager based in Central Georgia. His background includes corporate sales and management. John connected with Qwasar in the winter of 2020 and enrolled as a student, focused on utilizing his analytical skills to gain new qualifications. Before Qwasar, John attended the University of Vinnesota-Duluth, where he focused on Business Management before moving to Hawaii to begin his professional career. Having lived and worked in locations such as Nevada, Florida, Minnesota, New Jersey, Indiana, Oregon, and of course Georgia, John has gained and fine-tuned his ability to communicate and serve any different communities and peoples. Regarding his experience within the technical program and participation in the Qwasar social environment, John is wellsuited to help lead future students on their journey with Qwasar



Global leaders in advanced technical training.

Qwasar Silicon Valley was founded in 2019 following successful initiatives in the non-profit world for similar programs. We've spent the last twenty years building training programs for software engineers, and now we're building an improved learning platform to train millions, not just a few thousand. Here are some of our accomplishments:

- 3 successful IT & software engineering schools around the world
- Educated 25,000+ students over the last 20 years
- Won 3 awards including a distinguished WISE award
- Built a high school program for learning to code & pass the AP CSP exam
- Built a project incubator program
- Created an intensive one-year training program that placed over 75% of students in Tier 1 tech companies

Accreditation

Qwasar is partnering with Woolf University to offer an accredited Masters of Science in Computer Science program. Qwasar will essentially become "Qwasar College" under Woolf University, a similar set up to how universities in the UK are structured. Accreditation is via the European System, which requires Level 7 credits for a Master's program, and a total of 90 credits for a Masters. These are reflected in our curricula later in the brochure

Woolf requires us to maintain certain requirements, data, and documents. The vast majority of these are already part of Qwasar programs and our platform.

What is a Program Manager?

Since Qwasar uses project-based learning and skills-based learning, we don't have instructors or professors in the traditional sense who lecture, or Teacher Assistants (TAs) who answer student questions. Instead, the role of instructors is to facilitate students' learning through exploration, curiosity, inquiry, and challenges. Given this, we don't use the term instructors at Qwasar but instead use the term 'program managers.' They function in a similar manner to an engineering manager in the workplace

Masters Learner Brochure



Academics 2023/2024 Catalog

Silicon Valley Standards

Qwasar specializes in training learners to Silicon Valley standards. No other provider has yet succeeded in giving learners the opportunity to develop the breadth and depth of technical skills, knowledge, and software experience.

In a global digital economy, it's important to be able to compete on the global stage with other top-level talent.

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Software Engineering

Program Overview

This program focuses on software engineering principles, as well as strong fundamentals in data structures and algorithms. Learners will cover fundamental computer programming concepts including arrays, strings, algorithms, pointers, hash data structures, and software architecture, before moving on to focusing on front-end and back-end languages including JavaScript, using the terminal, C, Assembly, Shell, virtual machines, sockets, C++ and object-oriented programming, Elixir, network programming, Redis, and advanced algorithms and data structures. Our projects include a focus on software architecture, object-oriented design, and advanced back-end programming.

Learners are also expected to complete 30-40 technical interview role plays to prepare for real job interviews, and undergo resume and cover letter reviews similar to peer code reviews. Overall, our Software Engineering program is designed to train learners to Silicon Valley standards in software engineering with an emphasis on structured problem solving, critical thinking, and extensive preparation for meeting employer demands for entry-level jobs.



Sample Project in this Program: Skype

As one of their final projects in the program, learners have to build a video conferencing system similar to Skype. This requires network programming, memory management, optimization, software architecture, and strong debugging skills.

We include a simple architecture of what they have to build: a basic client-server diagram.

Launch yourself into software engineer jobs at top-tier tech companies with confidence, technical skills and a strong portfolio

	Core	Software Engineering 1	Software Engineering 2	Software Engineering 3
Full Time	11 weeks	12 weeks	8 weeks	12 weeks
Part Time	22 weeks	24 weeks	16 weeks	24 weeks
Qwasar Track	Preseason Arc 1	Season 2	Season 3 C++ Season 3 Go Season 3 Rust	
Course Name	Introduction to Programming 1 Arc 2 Design and Analysis of Algorithms (5 credits) Introduction to Computer Programming 2 (5 credits) Computer Systems and Their Fundamentals (5 credits) Data Structures (5 credits) Low-Level Design and Design Patterns (5 credits)	TIPP/BIPP	TIPP/BIPP Thesis (5 credits) Practical Software Engineering (5 credits) Back End Development (5 credits) Advanced Algorithms (5 credits) Distributed Systems (5 credits)	Capstone (30 credits) Advanced Applied Computer Science (5 Credits) Contribute to open-source TIPP/BIPP

CREDITS

The program has a total of 90 credits. Each course is 5 credits with the exception of a capstone project which is 30 credits.

POTENTIAL JOB TITLES

- Software Engineer
- Software Developer Senior Software Developer
- Backend Software Engineer

EXPECTED SALARY RANGES

The expected salary range for a Software Engineer position is \$135,000 to \$190,000 with an average starting salary of \$115,245.

Career Opportunities in Software Engineering

going into true software engineering roles, and eventually into software engineering management or more advanced individual contributor roles. The thesis and capstone offer an opportunity major banking institution, etc. It's up to you to choose specific for you to really customize and target what you want to do. Here topics within this specialization that will create specific career are some examples of career opportunities: autopilot software opportunities! engineer at Tesla, GM, Zoox, Cruise, etc.; embedded engineer at

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This program is a great career advancing opportunity for a medical device company; system on a chip software engineer at the likes of NVIDIA, Intel, etc.; audio software engineer for Kindle, Pandora, Spotify, etc.; software engineer for fintech at a

Full Stack Development

Work on both front end and back end of programs.

Program Overview

This program focuses on front-end and back-end development, as well as strong fundamentals in data structures and algorithms. Learners will cover fundamental computer programming concepts including arrays, strings, algorithms, pointers, hash data structures, and software architecture, before moving on to focusing on front-end and back-end languages including Ruby, Ruby on Rails, Javascript, HTML, CSS, Typescript, React, PostgreSQL, PHP, REST APIs, and Liquid. Our projects include a focus on databases, intermediate object-oriented design, and deploying to the cloud.

Learners are also expected to complete 30-40 technical interview role plays to prepare for real job interviews, and undergo resume and cover letter reviews similar to peer code reviews. Overall, our Full Stack Development program is designed to train learners to Silicon Valley standards in full stack development with an emphasis on structured problem solving, critical thinking, and extensive preparation for meeting employer demands for entry-level jobs.



Sample Project in this Program: Tetris

This is a working version of Tetris, a project built by a Qwasar student that requires game logic, design, and development, front-end and back-end programming, and software architecture.

	Core	Full Stack 1	Full Stack 2	DSA	Full Stack 3
Full Time	4 weeks	8 weeks	16 weeks	9 weeks	12 weeks
Part Time	8 weeks	16 weeks	32 weeks	18 weeks	24 weeks
Qwasar Track	Preseason Arc 1	Season 2 FS	Season 3 React Season 3 Backend Season 3 Java or Python	Arc 2	
Course Name	Preseason Arc 1 Introduction to Problem Solving 1	Season 2 FS TIPP/BIPP Data Structures (5 credits) Introduction to Programming 1 (5 credits) Design and Analysis of Algorithms (5 credits)	TIPP/BIPP Thesis (5 credits) Front-end Development (5 credits) Front End UI/UX Development (5 credits) Back-end Development (5 credits) Advanced Backend Development (5 credits) Advanced Backend Development (5 credits) Advanced Algorithms (5 credits) Introduction to Problem Solving Techniques 2 (5 credits)	TIPP/BIPP Design and Analysis of Algorithms (5 credits) Introduction to Computer Programming 2 (5 credits) Computer Systems and Their Fundamentals (5 credits)	Capstone (30 credits) Advanced Applied Computer Science (5 Credits) Contribute to open-source TIPP/BIPP

CREDITS

The program has a total of 90 credits. Each course is 5 credits with the exception of a capstone project which is 30 credits.

POTENTIAL JOB TITLES

 Full Stack Engineer Full Stack Developer Full Stack Java Developer

EXPECTED SALARY RANGES

The expected salary range for these positions is \$101,291 - \$192,938 with an average starting salary of \$123,414.

Career Opportunities in Full Stack Engineering

This program is a great career advancing opportunity for going into real full stack development roles, and eventually into specialized individual contributor roles or into software or product management. The thesis and capstone offer an opportunity for you to really customize and target what you want to do. Here are some examples of career opportunities: full stack engineer working on ecommerce for Amazon, L'Oreal,

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Poshmark, Mercedes, etc.; front-end engineer focused on enterprise architecture for Tier 1 & 2 companies; back-end Java engineer in fintech at major banking institutions; blockchain engineer at various crypto companies; full stack engineer in the green industry. It's up to you to choose specific topics within this specialization that will create specific career opportunities!.

AI/Machine Learning

Program Overview

This program focuses on the fundamentals of machine learning and data engineering, as well as strong fundamentals in data structures and algorithms. Learners will cover fundamental computer programming concepts including arrays, strings, algorithms, pointers, hash data structures, and software architecture, before moving on to focusing on front-end and back-end languages including JavaScript, IDE, Terminal, C IDE Assembly, Python, Pytorch, Jupyter, Panda, Tensor Flow, Keras, and Kaggle. Our projects include a focus on databases, architecture, large and complex data sets, and deploying to the cloud.

Learners are also expected to complete 30-40 technical interview role plays to prepare for real job interviews, and undergo resume and cover letter reviews similar to peer code reviews.

Overall, our AI/Machine Learning Engineer program is designed to train learners to Silicon Valley standards in machine learning with an emphasis on structured problem solving, critical thinking, and extensive preparation for meeting employer demands for entry-level



Sample Project in this Program: Atari Games

As part of their final projects in the program, learners have to build an AI that solves the classic/vintage video game called "Atari Games." This will require advanced algorithms, optimization, model design, deep learning, and some neural networks.

An ever-growing field in today's digital world.

	1	1	
	Core	AI/ML 1	AI/ML 2
Full Time	4 weeks	16 weeks	12 weeks
Part Time	8 weeks	32 weeks	24 weeks
Qwasar Track	Preseason Arc 1	Season 2 Data Science	Season 3
Course Name	Introduction to Problem Solving 1	TIPP/BIPP Data Structures (5 credits) Numerical Programming in Python (5 credits) High Dimensional Data Analysis (5 credits) Applied Statistics (5 credits) Introduction to Machine Learning (5 credits)	TIPP/BIPP Thesis (5 o Advanced Learning (! Deep Lear Computer credits) Introductio Deep Lear credits)

CREDITS

The program has a total of 90 credits. Each course is 5 credits with the exception of a capstone project which is 30 credits.

POTENTIAL JOB TITLES

- Al Specialist
- Machine Learning Engineer Machine Learning Scientist
- Deep Learning Specialist

EXPECTED SALARY RANGES

The expected salary range for these positions is: \$99,712 - \$251,778, with an average starting salary of \$158,447.

Career Opportunities in AI/ML Engineering

This program is a great career advancing opportunity for going Cruise, etc.; computer vision engineer working on various into Al/machine learning engineering roles, and eventually products at Apple; Al/ML engineer in fintech at a major banking into more advanced individual contributor roles or possibly machine learning engineering management. The thesis and consumer products at Snap, Meta, OpenAI, etc.; ML Engineer capstone offer an opportunity for you to really customize and for recommendation engines at Amazon, Sony Playstation, target what you want to do. Here are some examples of career opportunities: computer vision engineer for autopilot at Zoox, specialization that will create specific career opportunities!

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Masters Learner Brochure



DSA AI/ML 3 11 weeks 12 weeks 22 weeks 24 weeks AI/ML Arc 2 TIPP/BIPP Capstone (30 credits) credits) Design and Advanced Applied Machine Analysis of 5 credits) Algorithms (5 **Computer Science** credits) (5 Credits) ning for Vision (5 Introduction to Deep Learning for Natural Language Computer on to Programming 2 (5 Processing (5 credits) Credits) ning (5 Computer Systems Contribute to and Their open-source TIPP/BIPP Fundamentals (5 credits)

institution; ML engineer for NLP and chat working on direct to Netflix, etc. It's up to you to choose specific topics within this

Course Descriptions

Advanced Algorithms - 5 credits

An exploration into some of the major and most common advanced algorithms used in software engineering. Estimated # of Projects: 1

Advanced Applied Computer Science - 30 credits

This is the capstone project. This course applies computer science principles and concepts previously covered in the curriculum and focuses on delivery of a finished software project or product.

Estimated # of Projects: 1

Advanced Backend Development - 5 credits

Focusing on larger scale projects in Java or Python, students dig into more complex software architecture and object-oriented programming. Estimated # of Projects: 3

Advanced Machine Learning - 5 credits

This course dives into larger and more complex datasets, meaning more variables to take into account for building prediction models. Estimated # of Projects: 2

Applied Statistics - 5 credits

This course is on applying knowledge about statistics and programming.

Estimated # of Projects: 5

Back End Development (in multiple specializations) - 5 credits

This course involves learning and becoming proficient in a common modern backend programming language (Java, Go, Rust, or Ruby). Estimated # of Projects: 2

Computer Systems and Their Fundamentals - 5 credits

Explore the essential principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and mechanisms driving modern computer systems, including computer architecture, memory systems, stora second principles and second operating systems, and networks, through hands-on experience

Estimated # of Projects: 1

Data Structures - 5 credits

Students will learn to design, implement, and analyze efficient data structures and algorithms that power diverse applications, while honing problem-solving skills through practical exercises and projects

Estimated # of Projects: 4

Deep Learning for Computer Vision - 5 credits

This course focuses on a thesis for the AI/ML specialization. Students must choose, research, then present about a specific application or subject within

Estimated # of Projects: 1

Deep Learning for Natural Language Processing - 5 credits

This course involves contributing to an open-source project on NLP and requires reading and understanding existing code basis, logic, and NLP implementation. Estimated # of Projects: 1

Design and Analysis of Algorithms- 5 credits

immerse and explore algorithmic thinking, algorithmic techniques, analyze their efficiency, and master strategies to develop optimized solutions for complex

Estimated # of Projects: 3

Distributed Systems with High-Level System Design - 5 credits

unravel the principles, challenges, and cutting-edge techniques for building robust and scalable distributed systems in one of the leading programming languages in this area, Rust, while gaining hands-on experience in designing innovative solutions to real-world problems

Foundations of Cloud Computing - 5 credits

Estimated # of Projects: 3

Front End Ul/UX Development - 5 credits

This course focuses on learning to design and build multiple user interfaces for different D2C and B2B products built for mobile, web, and desktop. Estimated # of Projects: 3

Front-End Development - 5 credits Students gain proficiency in a modern front-end programming language (such as React.JS). Estimated # of Projects: 3

High Dimensional Data Analysis - 5 credits

Explore cutting-edge methodologies, algorithms, and visualization techniques to effectively extract meaningful insights from complex datasets with numerous dimensions, and apply this knowledge to solve real-world problems across various domains Estimated # of Projects: 1

Introduction to Computer Programming: Part 1 - 5 credits

Students delve deeper into modern programming languages, frameworks, and concepts that build upon concepts covered in Introduction to Problem Solving Part 1

Estimated # of Projects: 5

Introduction to Computer Programming: Part 2 - 5 credits

Students have to combine concepts in programming and start focusing on software architecture, file structure, and breaking down large problems into smaller parts.

Estimated # of Projects: 2

Introduction to Deep Learning - 5 credits

This course offers an applied approach to deep learning, pushing the edges of machine learning into neural networks. Estimated # of Projects: 1

Introduction to Machine Learning - 5 credits

This course delves into the foundational concepts, algorithms, and practical applications of machine learning, empowering you to build predictive models, extract valuable patterns from data, and revolutionize decision-making processes. Estimated # of Projects: 4

Introduction to Problem Solving - 5 credits

Dive right into programming and solving problems of increasing complexity. Students must use abstraction, inference, and various debugging techniques. Estimated # of Projects: 8

Introduction to Problem Solving Techniques Part 2 - 5 credits

This course focuses on problem solving skills and techniques under time pressure and practicing technical interviews of increasing difficulty. Estimated # of Projects: 1

Low-Level Design and Design Patterns - 5 credits

explore the intricacies of designing efficient and maintainable software systems at a granular level, while mastering the application of industry-standard design patterns to solve complex programming challenges and create robust, scalable, and flexible software solutions Estimated # of Projects: 3

Numerical Programming in Python - 5 credits

learn to harness Python's capabilities for scientific computing, numerical analysis, and data manipulation, equipping you with the skills to solve complex mathematical problems, simulate real-world scenarios, and optimize performance using various libraries and techniques Estimated # of Projects: 4

Practical Software Engineering - 5 credits

Add to your growing skillset with additional modern programming languages in backend engineering. Estimated # of Projects: 2

Relational Databases - 5 credits

gain a comprehensive understanding of database management systems, learn to design efficient and normalized relational schemas, master querying for data retrieval and manipulation, and explore advanced topics such as indexing, transaction management, and data integrity Estimated # of Projects: 2

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Grading

A Different Style of Grading.

Grading at Qwasar is different than traditional universities. We operate on what is considered more of a "pass/fail" system than the A/B/C/ D/F grading system that most universities use.

Grades for courses are comprised of 4 parts: projects, exercises, attendance, and participation. Each of these are weighted, and ultimately produce a grade for the course.

Projects are software projects assigned to learners during courses and throughout the program. Projects are expected to work: your code should do what was asked, meet industry best practices, respect the coding norm, pass unit tests, and meet required functionality.

Most projects are "graded" by peer code review. Code reviews at Qwasar are highly structured review systems where each project has grading rubrics, unit tests that must be passed, and requirements for respecting best practices and norms. As a result, students will likely at first fail their first code review for each project, then have to fix what isn't working, and resubmit the project for review until they pass the project.

Similarly, coding exercises aren't submitted for a grade: you need to work on them until they pass, i.e. until they work. Exercises are generally 20-60 minutes in duration, so it won't take too long until your code works. Exercises cover topics students have already been exposed to, and are like sports drills that a coach would make you do to practice a specific skill.

Credits

Each program is a total of 90 credits. This is made up from 5 credits per course, 5 credits for a thesis project, and 30 points for a capstone project.



Grading Policy

Our grading system reflects the comprehensive learning process, taking into account project completion, active participation in sessions, and the execution of assignments.

Grades will be comprised of:

- Projects
- Exercises
- Attendance
- Participation

In the case of thesis or final projects, grades will not include exercises but will still include attendance and participation in program meetings and activities. Failing a course consists of less than 80% completion. When a student fails to either drop or complete a course, administrators will assign a failing grade to that course.

An Incomplete grade is assigned for excused unfinished work, granted only with the approval of the program manager and following submission of the correct paperwork. The incomplete work must be finished and submitted by an agreed upon date, but no later than the last day of classes of the program immediately following the one in which the incomplete was granted. If there are extraordinary circumstances, a petition requesting additional time may be submitted to Qwasar. Any incomplete grade for an assignment becomes a fail if not resolved within the given timeframe.

An Incomplete grade may be assigned for a course if there are extraordinary circumstances and upon condition that a petition requesting additional time had been submitted to Qwasar. This is reserved for extraordinary circumstances in which students find themselves, and will be considered on a case by case basis at the sole discretion of Qwasar.

A Withdrawal is given if a student withdraws from school or drops a course after two weeks following the start date of the course.

Repeating Courses

When repeating a course, the original course or grade is not removed from the record. A course may only be repeated once, and only repeated courses taken at Qwasar Silicon Valley will alter the cumulative grade-point average.

Late Project Submission

We understand that unforeseen circumstances may occasionally prevent timely project submission. If a student anticipates a delay in project submission, they should inform their program manager as early as possible. If the program manager is not informed of the late submission, there will be a deduction in grading to maintain fairness.

Program Schedule

Program Overview

The Qwasar masters degree program is a one-year intensive coding degree program designed for learners interested in furthering their technical skills and getting into today's programming careers. It was developed from Qwasar's elite technical training programs with accreditation from Woolf University. Attendance is mandatory, please see attendance policies in the brochure. The program has a total of 90 credits with each course being 5 credits, a 5 credit thesis, and a 30 credit capstone project. The start date of the first full-time cohort will be October 2nd, and part-time on October 3rd.

Facilities used for Instruction:

In our online program, we leverage various technologies to facilitate learning and growth among our community. All Qwasar instruction and material is done in an integrated development environment (IDE). To foster collaboration and networking within our community, our Discord server was created as a means of communication. There are specific sub-channels within Discord for program specific topics, ways to reach out for help, and career resources and guidance. Our virtual meetings are held using Zoom video software so that all students are able to access meetings from across the world.

IDE

This program uses an Integrated development environment that we've built. Learners can code in a web browser and do not need to download any additional software to code.

DISCORD

We use Discord as a method to communicate with peers. Within the Qwasar Discord server, there are channels, resources and small group sessions in study rooms.

ZOOM

All meetings are held over Zoom in our virtual classroom. Students are expected to show up prepared to participate with their cameras on.

Full-Time Weekly Calendar



Part-Time Weekly Calendar



Start Dates

Full-Time Program Start Date : October 2nd Part-Time Program Start Date: October 3rd Masters Learner Brochure



Program Format



Asynchronous

Peer Code Reviews

Students will review each other's projects and code submitted to

increase code quality and feedback skills. Our system is seamless

and easy to use thanks to multiple integrated elements that

reflect what engineers or developers would use in the workplace.

Coding Projects/Assignments

Outside of synchronous class time, learners will spend most of their time coding and completing their exercises, projects, and assignments. This means researching and learning new terms or concepts, designing or architecting how they will solve a given problem (programming logic, file structures, etc.), coding in various languages, debugging, testing their code, and ensuring their solution works.



Career Prep

Qwasar takes career prep seriously, because these days, the process for getting into engineering jobs has become somewhat of a game and quite long. We help you learn to play the game and gain the skills you need to succeed at different rounds of the interview process. You'll do role play interviews as both the interviewer and the interviewee, technical interviews, behavioral interviews, resume review, and more.

What Your Week Looks Like

Synchronous



Daily Standups



and blockers on their projects. Everyone participates and shares thought processes and prepare for any blockers. status updates with one another and has an opportunity to get support from peers. These meetings hold students accountable and resemble what happens on the job.

Coding Collaboration Sessions

Students of all levels are divided into small groups to work on a timed challenge for a unique task. By working together, each group can leverage the collective skills of one another and make a network within the cohort.



Engineering Labs

After the first few courses, students will stop Live Coding Sessions and instead join an Engineer Lab. These are virtual, subjectbased labs focused on hands-on projects built in groups. Projects offer an opportunity to explore the subject area while learning to collaborate with other students. Both projects and the labs themselves are great items to put on the resume!

Similar to many job application stages that required a HackerRank challenge, timed coding assignments are 20-40 minute timed coding exercises given to students. The goal is to complete the assignment under the time constraint. This weekly exercise is a great way of practicing HackerRank-style questions before facing the real deal.

Live Coding Sessions

Standups are held every morning to kick off the day with the 1-2 hour remote live video call in which we solve a coding problem cohort. This gives students an opportunity to share any progress in front of other learners. This gives learners the opportunity to share

Weekly Presentation

Building communication and public speaking skills is important for the workplace as an engineer. By public speaking, we don't mean in front of thousands of people, but rather to 10 or 20 people. This could be you as an engineer presenting to your team, or management. Weekly Presentations will rotate subject areas and will rotate presenters, so students will attend presentations then present themselves every 6-8 weeks. Topics cover new tools or technologies, common technical interview subjects, or themed startups.



Timed Coding Assignments

Style of Instruction

A Different Style of Learning.

Learning at Qwasar differs from anything you may have experienced before. Our learning science incorporates aspects of project-based learning, competency-based education, active learning, and skills-based learning. Combining these concepts creates a unique environment for all students to succeed. Our weekly meetings and programs give ample opportunities for students to collaborate, communicate, and share project progress. The remote nature of our programs allows students to learn from anywhere in the world.

85% Coding, 15% Lectures

Qwasar's model is based on active learning, meaning you will spend WAY more time coding than sitting in lectures or presentations. Our program is designed to spend 85% of your time coding, and about 15% of your time in 'knowledge-transmission' sessions where one individual is imparting knowledge, often in the form of a lecture or presentation. We do this for 2 reasons: first, our focus is on gaining skills for being on the job as an engineer, and second, active learning has been scientifically proven to be more effective than passive, lecture-based learning.

No Single Source of Truth (Like a Professor)

In traditional university programs, there's a single source of truth for a given course: the professor. But on the job, there's no source of truth; you're expected to be able to figure things out on your own and be resourceful. You need to be efficient at researching, finding what's applicable, forming and testing possible solutions, analyzing results, making decisions - and all that takes practice. There's also multiple ways of solving a single problem, and deciding which approach is best in any situation is also a skill that you won't learn if there's always a Prof giving you the answer. So our model is very different from traditional courses, but it's much more aligned to actual work than lectures, courses, and exams that don't allow for life's ambiguity.



The Qwasar Learning Platform

Integrated Development Environment

In order to make coding more accessible and to reflect the methods that some Tier 1 tech companies have already adopted, we've built an IDE: integrated development environment. This means that learners can code in a web browser and do not need to download additional software in order to code. Since everything is in the cloud, and because user experience is important, all work is saved and re-loaded so learners don't lose their work despite working in an IDE.

Autocorrection System

Our system has a built-in autocorrection system for many of our exercises and projects. This is in addition to the peer correction system that fosters an advanced-to-younger learner review for submitted work. Additionally, we've building an automated exercise and project subject generation system using AI, natural language processing, and machine learning. We hope to make the platform enjoyable for learners who keep coming back to learn more skills by keeping the content fresh.

Sophisticated Peer Review System

To help learners develop critical thinking skills and become familiar with all aspects of giving and receiving peer code reviews, we have developed a sophisticated and proprietary peer review system that guides reviewers through reviews and provides relevant information as they go. Our system is seamless and easy to use thanks to multiple integrated elements that reflect what engineers or developers would use in the workplace.









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At Qwasar, you are responsible for your learning, just as you would be responsible for your work in a job. Problem-based learning involves finding, trying, and building solutions. With no single source of truth and no answers provided, it's up to you to figure out how to make your code work, when and how to ask for help, and how to successfully build software in a team.



Competency-based Education

By informing the learning journey and building in flexibility and support for learners, there is equitable learner achievement. Using CBE to assess learner competencies is an effective way to see true performance and monitor/implement solutions to be developed. The learning lifecycle will vary from learner to learner but CBE enables them to develop relevant and essential skills to progress towards their educational goals, whether it is a degree or certificate. With such a high level of transparency in a CBE program, there is a smaller gap in expectations of students and institutions.

Support During Learning

Throughout the program, there is comprehensive support from multiple angles. First, a program manager is always available to assist in program questions or blockers. Students have access to reach out to one another through Zulip and Discord to get assistance from a peer who recently finished each project. The environment at Qwasar encourages learners to reach out and ask for help with issues.

Growth Mindset

Furthering your skill sets and striving to achieve more within your life is fostered in our community at Qwasar. After only a few weeks in our programs, many students have grown leaps and bounds where they started. Think of where you will be in 3 months, 6 months, or even a year if you start today.



Not About Letter Grades

Unlike traditional educational models where a percentage grade is attached to each assignment, Qwasar utilizes a pass/fail model. In each project that is submitted, you either pass or fail, like in the real-world. If you pass, you move onto the next project. If you fail, you fix your mistakes and resubmit. Learning the concept is more important than acing a test.



Different Style of Instruction

Also unlike traditional educational models, Qwasar is hands-on and 100% active learning. There are no lectures to sit through. All learning is done by doing. Projects and coding assignments are used to teach and develop competency in students.



Don't Give Up

Learning to code is like learning any new skill. It will be tough and there will be difficult moments. It is important to remember to push through, give it your best effort and work hard. The benefits of developing a valuable skill far outweigh the difficulties to achieve success.



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Learning Science Competency-based Education

How Learning Works



Active learning is better than passive learning. You remember more, you actually build skills and the ability to code, you're preparing for success on the job, it's what's needed in the 21st-century.

Qwasar uses active learning, meaning you actively participate and engage in the learning process. Passive learning, such as sitting in a lecture or watching an online video, doesn't require much effort or engagement. At Qwasar, you code, build, fix, debug, design, and actually produce work. This approach helps you to build real on-thejob competencies and skills that you'll need and use in the workplace.

What is competency-based education? There are 8 elements of CBE that we incorporate in our programs to ensure successful implementation.

- Demonstrated institutional commitment to and capacity for CBE innovation
- Clear, measurable, meaningful and integrated competencies
- Coherent program and curriculum design
- Credential-level assessment strategy with robust implementation

Intentionally designed and engaged learner experience

- Collaborative engagement with external partners
- Transparency of student learning
- Evidence-driven continuous improvement

Why competency-based education?

Competency-based education takes our students from awareness of a concept to mastery of the skill. This transition takes time, hard work, and practice for those dedicated to improving their capabilities. The focus is not about passing a test or getting a good grade, but rather about mastering a skill to a level where you are truly competent. CBE trains learners to industry standards needed for entrylevel jobs and prepares them with crucial onthe-job skills. It also assists learners in practicing developing on-the-job skills before gaining employment, unlike any other style of instruction.

Project-based Learning

Project-based learning is a key component of developing competencies. This approach enables students to take control of their own learning and to learn in a way that works for them. You should expect: active learning, high-engagement, problem solving, high-level thinking skills, and trial and error.



Role Plays

Role plays give students the opportunities to act out real-world scenarios that commonly occur on the job. This approach lets them experience and build skills necessary for the future.

الله Gamification

Qwasar uses 6 elements of gamification in learning: points, quests, skills, virtual economy, levels, and unlockable content. These elements are designed to work together to both direct and motivate learners. Our structure is focused around the individual and encourages submitting client-ready work, helping others learn, and advancing through our curriculum.

Peer Code Reviews

Peer code reviews are completed throughout the course of our programs. Students will submit their projects to be reviewed by one another to receive feedback. They will also participate in giving others reviews on their work. This is exactly what happens on the job, which is why it's important to practice.

A Virtual Campus Get to Know Your Community

Joining our programs is not just about academics.

Participation is Expected

Get to Know Others

It may seem difficult at first to connect

Joining our programs is committing to participating in all program events. Since there is no physical campus, you develop ways to virtually meet and interact with others in your cohort. You will be expected to participate and engage with the community. You are not just showing up to class, you are joining a lifestyle of developers committed to lifelong learning. There are many support mechanisms in place at Qwasar including one-on-one sessions, group sessions, daily standups, etc.

and collaborate with others in a virtual classroom. We have implemented many opportunities that are simple and easy to chat with other students. We utilize Discord to provide a user-friendly platform to message and call your peers. If you decide to work through problems together or partner up on a project, you can connect through this platform. Throughout weekly meetings, you will hear from students about progress updates and be able to start conversations based on their responses. Also, you will be grouped up with different people each week for coding collaboration sessions.

Grades in Real-Time

In a digital world, grading is completed faster than ever to allow student feedback to be returned and dissected quicker than in classrooms. Due to the online nature of our school, we have auto-grading and peer-reviewed assignments that are returned to students quicker than ever.



What Engagement Looks Like



Group Debugging Sessions

Looking at each other's code, understanding logic, identifying where possible bugs could be and questioning all functions to help identify bugs.

Small Group Sessions

You will be partnered up with other students in your cohort to work on problems together.



Virtual Coworking Rooms

There are always opportunities available to code with one another in coworking rooms.

Peer Reviews

Learners will have numerous opportunities to act as the reviewer and reviewee to gain valuable perspective on the review process.

Intensely Collaborative

Working with peers is very common throughout the curriculum as well as coding collaboration sessions.



We utilize the Discord platform to give students a space to communicate and collaborate with one another. These channels allow students to receive project support and chat with others in the community.



Program Requirements Committing Long-term

Learning New Skills Takes Time

Despite what other programs might sell, learning new skills takes time, and certainly learning to the entry-level demands that most tech companies require takes time. That's normal - it takes us humans practice and repetition to get good at something. Our programs generally take 9-18 months to complete depending on your previous experience, your time commitment, and how many hours per week you work.

Commitment Drives Community

Minimum commitment requirements are part of our programs because consistent commitment and attendance drives community, support mechanisms in the programs, and encourages other learners. You will learn from others and others will learn from you, but being present is necessary to foster interactions for such learning opportunities. Being an online program, all 'synchronous' time together with other learners is important. Below you'll find the program commitment and entry requirements.

Program Commitments

Program Entry Requirements

There are minimum commitments. Here is a list of what's expected of you:

- » Are you able to attend daily standups?
- » Are you able to attend live coding sessions?
- » Are you available to attend coding collaboration sessions?
- » Are you able to commit to 9 12 months on average?
- » Are you able to commit to 15-20 hours/week part-time or 40 hours a week full time?

There are program requirements in order to ensure completion and eligibility for the program:

Minimum Requirements:

- » Previous coding experience in at least 2 programming languages
- » Do you have a minimum understanding of the software development lifecycle, command line, data structures, and algorithms?
- » Do you have a high school diploma?
- » Do you have a working webcam?
- » Do you have a computer to complete the projects?

Additional Requirements:

- » Hackerrank Test
- » Personality and IQ Test
- » Take-Home Assignments
- » Technical Interview

Program Duration Hard Work Pays Off



Full-Time	Part
40 hours per week	20 hou
Meetings Monday - Friday	Meetin
Expected duration: 13 months	Expect
3 intakes per year for each program	3 intak

t-Time

- ours per week tings Tuesday evenings and Saturdays
- ected duration: 24 months akes per year for each program

Engineering Labs

Industry-focused Hands-on Virtual Labs

Qwasar's Engineering Labs are virtual, subject-focused labs where students work in pairs or groups to build a software project. Projects will last anywhere from 2 to 6 weeks depending on the size and difficulty of the project. These are great opportunities to put projects and the Labs on your resume, and to explore some of today's emerging technologies and subjects.

Labs are also opportunities for students to pursue areas they're passionate about, or areas in which they lack experience and want to gain more exposure.

Blockchain Lab

Our blockchain lab will focus on applications of blockchain to solve problems, or rebuild similar but different solutions to what already exists in this space.

Computer Vision Lab

Our computer vision lab focuses on different applications of computer vision. This could include autopilot, supply chain, facial recognition, and much more. Students will explore existing cloud-based tools that enable quick deployment of computer vision, then move on to more advanced applications and concepts.

FO

Distributed Computing Lab

A hot topic among enterprise software engineering, our Distributed Computer Lab offers an opportunity to learn about and build software on that's distributed. Students must be in the Software Engineering or AI/ML Engineering specialization to join this lab.



Our IoT lab will focus on combining hardware and software, touching on embedded engineering and more low-level programming. Learners will likely have to buy some small hardware supplies (Arduino) to work with.

Capstone Project

Significant Part of Overall Grade

The capstone project counts towards 30 credits of your overall 90 credits for the program. This project can be a huge lift in your overall performance. In that respect, it will last for 8-12 weeks depending on the program in order to create a quality, solid piece of work.

The choice is yours

Similar to the thesis project, you will have some flexibility in choosing the topic of your capstone project, upon approval by Qwasar. The major requirement is that it is related to the industry that you want to go into. This project is a massive piece to put into your technical portfolio and will demonstrate why you are a perfect candidate for future jobs. You will have to build software and prove your abilities.

Example:

Car-to-Car Communication System

This system would ultimately reduce the need for stop signs. The idea is that certain cars would change speed to go through intersections more efficiently. Some would speed up while others slowed down, without anyone having to stop. In order for this to work, you would need to build algorithms and utilize network programming.

Thesis Project



The thesis requirement at Qwasar will be to write a professional paper including a slide deck and a recorded presentation on your topic. This topic can be anything that interests you, but it will be subject to Qwasar approval. There are some restrictions on how wide the subject area of your topic can be. This project is worth 5 credits out of the total 90 for the program. This project will be both peer-reviewed and instructor-reviewed for a final grade.

Length of time

This project will take some quality time and dedication to research and prepare. It cannot be put together overnight. For the full-time program, prepare to work on it for 2 weeks of the program. For the part-time program, prepare to work on it for 4 weeks of the program. Once the paper component is complete, you will need to create a slide deck and then record yourself presenting it for the group.

Academic Article Reviews

An additional component of the thesis requirement is that you must review two academic articles. You will be required to do 2 per course and 2 as part of each academic project at Qwasar (Capstone, thesis, etc.) on topics such as algorithms, computer science, etc.

Technical Portfolio

This project will be an excellent addition to your technical portfolio that you can portray to future employers and interviewers in the career search process. It also helps you see new perspectives on topics and interests that may interest you in the future.

Disclaimer

We expect students to be resourceful and use various tools at their disposal but the real point is to display competency in the subject area. It's something you can use for a long time when interviewing.

Career Opportunities Getting a Job

Preparation for Employment.

The pathway from our programs into getting a job in the tech industry is made as seamless as possible. We prepare you throughout the entire course of your program for on-the-job success as well as impressive capabilities for a technical portfolio. Our students are highly regarded graduates and receive offers from top-tier companies across the world. We also partner with many employers to offer networking and career on-ramps.

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Meeting Employer Demands What Employers Like About Our Programs

Technical Level

As a result of the rigorous Silicon-valley standards curriculum, our graduates are a technical level above others when applying to jobs. The methods by which they have learned, have ensured that they are competent in the subject matters for on-the-job performance.

Confidence in Competency

Our graduates have developed a strong confidence in the quality of their code. They have executed hours of practice and received ample review from peers and professionals to gain confidence in the work that they produce.

Skill Sets

Our graduates develop a suite of technical as well as soft skills through the program. These are skills that can be applied in later positions. They are well-rounded learners and have mastered the application and concept of in-demand, on-thejob skills.

Resourceful Problem Solvers

When faced with a problem, learners take a multi-perspective approach to coming up with a solution. Some reach out to a peer who recently completed the project, while others build a diagram based on the problem.

Skills Based

Through a skills-based program, our learners focus on mastering the skills they will need to be successful. They spend time developing and practicing the useful skill sets for future employment. By program completion, they have both soft and hard skills necessary to excel in a digital world.

Competency-Based

Learning competencies is the most effective way to prepare tech talent. This method of learning secures the level of understanding and ability of students. It is a more informed learning journey that enables students to be in control of their

Workplace readiness

When our learners enter the workforce, we strive for them to be prepared on day one. This means less time spent on training them from an employer. They have a suite of skills and capabilities they can deploy from the start and impress their boss.

Confidence

outcome.

Building confidence takes time but it is so important for working in any setting. Being able to share updates and feel positively about completed work is at the core of our programs. We encourage all learners to reach out to each other and provide feedback for reviews.

Time Management Skills

Utilizing and managing time in a technical training program can be difficult. Students make choices to complete projects in a certain order and work with their groups when needed. They prepare projects for deadlines and work when they are able to.

Creativity

There is a significant level of creativity required in our program as students learn to solve problems and debug code through a variety of methods. You will constantly be exposed to new and creative ways to understand key concepts.

Adaptability and Flexibility

Since our programs are remote and self-paced, there is a built level of adaptability and flexibility. If a learner has other commitments, we offer part-time programs as well. This translates into better learning outcomes and less sacrifices made on the student's end.

Collaboration

Sharing thoughts, ideas, and processes with one another enables students to build strong collaboration skills. Each program includes projects to be worked on with others. This allows students to get a new perspective on solving bugs and building program architecture.

How Our Programs Compare to Traditional Master's Programs

A program that prepares for being a modern engineer in today's world.

No Lectures, Textbooks, or Chalkboards!

We're in the 21st-century - textbooks and lectures are an old model of learning and don't at all reflect what engineers do on the job. Our approach reflects modern learning science and what the modern working world is like.

Ownership and Control of Your Learning

We don't live in a world where people learn X in Y amount of time, like a Fordism factory. People aren't machines! We should be able to learn at a pace that works for us but that still has community. You have much more control of your learning in our program, and you get to choose specializations, thesis, and capstone subjects.

Modern Programming Languages

Traditional universities focus on C++, Python, and Java. But industry is using Rust, Go, React, Typescript, C, and hundreds of other languages. At Qwasar, you learn languages that are actually used today, and have the opportunity to focus on additional applicable languages.

No Video Lectures & Required Online Forum Posts

Many online MSCS programs are really just video lectures, exams, and required participation in online forums. The focus isn't on coding or on community. Qwasar is all about coding, collaboration, community, and active learning - learning that isn't boring!



Qwasar MSCS vs. Other Online MSCS Programs How We're Different

As you go through our program, you develop the skills you need. Some of the main things that set us apart are the depth and breadth of skills learned in our programs, problem solving strategies when debugging, and the caliber of software architecture knowledge. The preparation our students undergo is on an entirely whole other level.

Qwasar	Traditional Masters
85% coding, 15% lectures	10% coding, 90% lectures
20-30 software projects completed, from start to finish	1-2 software projects completed, from start to finish
Freedom to use any available resource (stackoverflow, reddit, textbooks, youtube, etc.)	Textbooks and reading required
Peer code reviews	Mid-terms and final exams
You build from scratch	Skeleton code provided
You actually have to DO parallel programming	Read about parallel programming
All access to the curriculum, assignments, exercises	Assignments not given in advance, hidden from students
Rust, Go, C/C++, React, Typescript, Python, Ruby, Pytorch, Jupyter, Tensorflow, and MODERN languages/tools	C++, Java, Python. The traditional 3.
Write 1000 lines of code	Modify 100 lines of code in a base of 1000
YOU have to figure it out! (Because your boss won't ever give you step by step instructions on the job!)	Step by step instructions provided
Full code reviews with specific feedback and code comments	Grading by scripts, no feedback
Significant technical interview preparation and practice	Little to no technical interview practice



4 Elements That Set Us and You Apart From Other Training Providers.

There is a fundamental difference between bootcamps and CS degrees, and that's our learning model, thus, the outcomes are different, the learning experience is different, and your role in your own learning is different. The main differences between Qwasar and other training options are:

- Skill level achieved
- Your thinking abilities & problem solving
- Experience level
- Your readiness for the workplace
- Languages, tools and skills used,
- Number of projects completed & lines of code written
- Your confidence level
- How learning occurs

Depth

Breadth

Rigor

Confidence

Why Us: We Train to Silicon Valley Standards

Silicon Valley standards are a set of minimum standards and best practices that are generally expected of software engineers at the majority of tech companies or software positions in Silicon Valley, California, Seattle, and most major tech hubs. Silicon Valley has a history of drawing some of the world's most talented software engineering talent, and companies have adopted a minimum set of expectations they want to see in their software candidates.

These standards include:

- Strong fundamental understanding of software engineering concepts .
- Clear ability to work with and build algorithms •
- Ability to write clean, easy-to-maintain code that follows a coding norm at 100% .
- Seamlessly give and receive peer code reviews .
- Break down a problem into smaller parts, bringing structure, logic, and creative solutions to each part as well as the problem as a whole
- Ability to code in one higher-level language and one lower-level language fluently .
- Experience with and knowledge of the software development lifecycle and how it impacts any given project .
- Follow best practices for writing code and designing software •
- Ability to debug code with a structured, disciplined approach .
- Can use Git and version tracking software seamlessly .
- Navigates using the command line and familiar with standard coding tools •
- Understands at a fundamental level how computers treat data, how memory works, and the trade-offs between memory and CPU .
- Strong decision making skills, logic, and software architecture comprehension
- Able to learn new tools and language quickly .

No other program trains to Silicon Valley standards. Years of working in software and in Silicon Valley have informed our program curriculum, how learning works, and how we train you to the level you need to succeed.



Project Comparison:

A concrete look at how we train to a different level

Other Online MSCS Program: Paxos Algorithm

A large and leading online MSCS program has a course in Distributed Computing. One of the 'projects' is for students to implement the Paxos algorithm.

- skeleton code is provided for the project
- step-by-step instructions are provided
- students get a grade but no feedback on their code

Qwasar MSCS: Paxos Algorithm

- At Qwasar, students will likely encounter the Paxos algorithm in one of our Engineering Labs. Students would have to:
- build their entire code base from scratch, nothing is provided
- decide on their own architecture, structure, etc.
- break down the problem into smaller parts on their own
- undergo peer code review, receive feedback, work on their code, then resubmit until they pass the project

Resume Build a Strong Technical Portfolio

Show proof of what you're capable of building

A technical portfolio is one of the most important documents you provide a recruiter to prove your capabilities. It needs to illustrate the depth and breadth of your

technical competencies as well as display your experience in building software. The portfolio will differ in content for each specific job title you apply to.



How We Develop it

We have provided numerous projects and opportunities within each track of our programs to enable students to demonstrate their work and understanding of key concepts. These can be added to technical portfolios once they are clean, functioning, debugged, in working order, and well architected. We also offer opportunities for peer code reviews to ensure projects are up to a high standard.



How We Specialize

We specialize in building a strong technical portfolio by including top skills that employers look for. We train students to be competent and capable of explaining their competencies on their resume as well as in interviews.



Advantages

Explanation:

Learners develop a technical portfolio that has depth and shows the extent of their technical skills and ability to handle databases, deployments, and development. Neither bootcamps nor CS degrees offer this.



Communication

Talks like a programmer with confidence

$\langle \rangle$

Technical Skills

Understand and use languages freely



Structures and breaks down a

problem, perseveres

Collaboration

Works well and efficiently coding with others; confidence in teamwork



Peer Coding

Writes code others can read; gives great feedback on code reviews



Interviewing

Confident in ability to succeed in technical interviews

Resume Preparation and Review Helping You Overcome Job Application Barriers

John Doe 123-456-7890 email@email.com LinkedIn Git

SUMMARY

Software professional with software development experience, a strong sense of logic, and a love for problem-solving. Trained in the FileMaker platform, FileMaker best practices and looking to apply my skills to a challenging, high-impact team of developer to deliver quality FileMaker applications. Experienced in full stack development with foundations in data structures, algorithms, and architecture SKILLS

- Languages: Ruby, HTML, CSS, React.JS, Ruby on Rails, JavaScript, JQuery •
- Tools/Frameworks: FileMaker, Heroku,
- Databases: SQLite, SQL
- Testing, deployment: unit testing, structured debugging, Git, documentation Soft skills: creativity, collaboration, communication, structured problem solving, adaptable,

In a FileMaker developer role at your company, I will:

- Actively contribute to software design and architecture discussions •
- Deliver quality, readable and maintainable code written to the norm and peer reviewed
- Help to debug and problem solve issues, understanding trade-offs and decision points
- Successful execute pair programming and teamwork while looking to mentor younger developers

TECHNICAL PORTFOLIO

Parts Inventory

- Ecommerce inventory system for car parts company
 - Tech stack: FileMaker, Ruby, Ruby on Rails, CSS, Javascript
 - Designed and built a simple inventory system on the FileMaker platform for a car parts company Developed SQL module for FileMaker to import and export data on a weekly basis

 - Developed a custom GUI for ease of use
 - Developed technical and functional specifications, maintained upgrade schedule and performed patch updates

My_Skype Video and Audio Conference

- Design and build a functioning video conference application

 Tech stack: C++/Java/Elixir (server language), server-client sockets, React.JS and web sockets, Postgres, Redis

 - Designed architecture, API for communication between server and backend, and API for communication between clients Built client server with request routing, authentication verification, direct connection to another client, CODEC video-audio transfer,
 - and UI
 - Built bad noise detection feature to improve audio quality and user experience

My_Users App

- Built a full stack application for user management
- Tech stack: Ruby
- Designed a database for user creation, user management, and permissions Implemented front-end and back-end that enabled a user to create, edit, and delete an

My_SQLite

Rebuilt SQLite database in Ruby

account

- Tech stack: Ruby
- Built a light-weight autonomous database following the SQL syntax protocol
- · Gained strong understanding of data structures, simple vs join requests, and database architecture

PROFESSIONAL EXPERIENCE

Developer Intern

- Claris Partner 1 Implemented new feature for mobile app for tracking luggage location ٠
- Worked with front-end development team for feature deployment
- Feature deployment decrease support calls by 10%

Retail Associate Starbucks, San Jose, CA

- Resolved customer problems with poise, efficiency, and calm
- Consistently delivered 110% of target monthly sales

EDUCATION

Qwasar Silicon Valley - Claris App Developer Program in partnership with Claris

Live I aithub

Technical Resume Preparation

Resume preparation is a process that involves preparing the specifics and reviewing beforehand. The resume needs include everything you have completed in terms of projects and coding languages you have mastered. You need to be concise and consistent to show what you know.

LinkedIn profile

Your LinkedIn profile is just an extension of your resume. It needs to be professional as well as fine-tuned before job applications. All coding languages, projects, and capabilities need to be listed and accurately described to portray to employers your true strengths. We work with students by giving feedback on their profiles.

Using the right keywords

Keywords are crucial to comply with the ATS systems reviewing most resumes in the 21st century. In order to get past the digital algorithms that take a first look at potential candidates, there is a certain format and standard to adhere to. Following these guidelines, you have a better chance of going through to the next round.

Review and Feedback

We review resumes with students as well as within the community to get feedback and prepare the best version of a resume. Feedback is important to ensure your capabilities are being summarized in a way that will impress recruiters and future employers.

Live I github

Live I github

Sept 2020 - December 2020

January 2018 to August 2020

Live I github

Technical Interview Preparation



"I have a career in the Tech Industry thanks to the educational model that Qwasar's leadership team has built. They have created an inclusive and accessible software engineering program making it possible for anyone to enter the tech industry and succeed without the burden of college loan debt. That to me is creating social equity."

Using practice and role play to develop key interviewing skills

$\langle \rangle$ **40 Technical Interviews**

communication skills.



Interviewer Perspective

You will gain the perspective to be a better interviewee. This gives you a chance to see how the process works from the other side and better inform your own future interviews. It builds confidence in your ability to communicate with peers and in industry.

Throughout the technical interview preparation program,

over 40 technical interviews. These are 45 minutes long and

contain sample questions from industry to build effective

learners will gain confidence through the completion of



Resume Review

We review profiles to ensure students have accurately included all of their programming skills and explained their education/ experience effectively, while staying ATS friendly. Students will also review each others' resumes and profiles to share information or expertise that they have learned in their past experience, and gain valuable knowledge from each other. Students also review non-student resumes, playing the role of the recruiter to understand how recruiters interact with resume This is done in an effort to ensure great first impressions.



Interview Role Plays

The use of role plays allows students to practice with real-world scenarios taken straight from industry. We use role play to develop soft skills such as job negotiations or conflict resolution. We also use role play in technical interview practice where participants will both be the interviewee and the interviewer. This dual-sided perspective is unique to our program & helps build better interviewees



HackerRank

Learners practice coding exercises in 12 major areas which include do or die coding challenges very commonly used in industry.



Behavioral Questions

These are the areas where our students put their soft skills to work. In interviews these are often the non-technical questions that involve telling the interviewer about yourself and describing your strengths and weaknesses. This is a skill that we make sure our students practice in technical interview preparation. Presenting yourself and communicating about yourself is a skill that needs to be developed and worked on.

Software Development Experience How We're Different



010 101 This means writing code to a norm or coding standards while also adhering to industry best practices such as function length, writing code that's easy to read and maintain, clearly annotating code for other engineers.

Depth and Breadth of Skills



Knowledge of technical skills is a defining factor in a good candidate for job applications. They are what sets you apart from other candidates who may not have gone the extra mile to ensure their skills are what the employers are looking for. With skills-based learning, the entire curriculum is centered and developed around the in-demand skills that employers are looking for. It ensures that they are putting their time and resources to good use. In the Qwasar curriculum, many other factors are built into the education besides just technical skills. Soft skills are developed in many ways through program events like live coding, coding collaboration, and peer code reviews. Structured problem solving is honed through numerous activities within our programs.

Software Architecture

You will be engaged in designing a full architectural schema with diagrams to gain significant software development experience. Repetitive practice of this throughout the course of the program leads to better quality designs and impressive architecture. There are weekly discussions on software architecture and design.

Software Development Lifecycle (SLDC) </>

The SDLC is a key component of our learners' education. Through this cycle in their curriculum, they gain significant software development experience. The software development life cycle is a major component of our learners' education. They gain significant software development experience by going through this cycle in their curriculum. Through requirement analysis, learners become adept at breaking down a problem into smaller components and looking at what really needs to be solved. In the definition stage, they are putting the actual problem into words to determine what needs to be solved. Then, they will design a solution so that they know what to build and how to go about solving it. After that, they will code the problem and then test their solution once built. Finally, they deploy the solution after fully understanding their solution. After this stage is maintenance which involves fixing any bugs or issues once the solution is deployed. This could be from feedback given by peers. Students go through the entire software development lifecycle in their projects at Qwasar which allows them opportunities to fully understand each step and ask for feedback or help where needed. Experience is gained through industry standard projects that students complete, related to actual tasks they will have in industry one day.

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Peer Code Reviews How We're Different

Reflecting what happens on the job

These reviews are a great way for students to contribute to the learning community as a whole. By engaging in dual-sided review scenarios, you gain confidence in

communicating by giving and receiving feedback from your peers.

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Confidence in Reviewing/ Feedback

Taking feedback is not always an easy concept when you have spent time and effort on a project. But working through constructive feedback leads to better quality code. At Qwasar, we utilize the two-way interview system to make better candidates for employment. Our students are more capable of articulating errors in code and revisions needed on peer projects.



New perspectives

When students are able to act as the reviewer and reviewee, they gain a better understanding of solutions and improvements needed for projects. Students can share their knowledge with one another in a light that they may not have considered before. Since everyone thinks and learns differently, there is always a new way to look at something that can help someone out.



7215

Peer Code Reviews already completed by learners at Qwasar



30%

Software Engineer's time is spent doing code reviews



Six Elements of a Peer Code Review

Unit Tests

Unit tests examine the ability of submitted code to handle common and uncommon use cases. Each case should be dealt with appropriately.

Automatic Code Quality Evaluator

Our automatic code quality evaluator looks at the quality of code that has been submitted, as well as how much has been written by the student or copied and pasted from the internet.

Coding Norm/Coding Standards Evaluator

Our coding norm/coding standards evaluator examines how much of the code submitted is up to the coding norm or standards. Code must be 100% according to the norm or else the project is not accepted.

architecture.

Standard Code Best Practices

Submitted code is evaluated for standard code best practices such as not accepting "god functions" - functions that are longer than 50 lines. These best practices are known in industry and learned through doing.

Functionality tests examine whether the code that has been submitted functions as it should according to project descriptions and specifications.

Code Commenting

Peer reviewers look at the code in our Git system, and leave comments on code creativity, structure, formatting, and

Functionality Tests

Policies Rules and Regulations

We encourage all students to review our policies to understand how to be successful in our programs. These rules and regulations are set forth to ensure academic honesty and integrity and instill values and long-term success for all students who go through our program. If you have any questions regarding our policies, don't hesitate to reach out.

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Attendance Policies Attendance and Participation Policy

In the Qwasar Silicon Valley Masters in Software Engineering program, we emphasize collaborative and participative learning. Regular attendance and active participation in all learning activities, including stand-up sessions, live coding sessions, and coding collaboration sessions, are crucial for achieving academic success and gaining the most from the program.

Our programs are meticulously designed to emulate a typical day in the technology industry, preparing students for a thriving career. Essential to this preparation is the development of responsibility, reliability, and professional habits that mirror the expectations of tech industry employers.

Expectations

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Our students are expected to demonstrate punctuality, regular attendance, and consistent progress throughout their learning journey. This involves attending all mandatory meetings specified for their program, arriving on time, and communicating any potential conflicts with their program manager in advance.

Regular Attendance

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To maintain good standing in the program, students are expected to maintain a daily attendance record of at least 75%. It's important to note that excused absences do not impact this percentage.

Excused Absences



While we understand that circumstances may arise that prevent attendance, it is crucial that these are communicated to the program manager in advance. Excused absences may include situations such as illness or other unavoidable commitments.

Non-compliance

Repeated absences, tardiness, or failure to communicate any conflicts could result in disciplinary actions, ranging from warnings and probation to potential dismissal from the program. Falling below the required 75% attendance level may also lead to a probationary period, during which the student and the program manager will establish a plan to improve attendance.

Active Participation

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Beyond being present at scheduled sessions, students are also expected to engage actively in their learning journey. Active participation entails a readiness to be involved in the learning activities, to contribute thoughtfully to discussions, and to collaborate effectively with peers.

Participation in this context involves: **1. Engagement in Sessions:**

During learning activities, program meetings, collaborative assignments, and any activity related to Qwasar's programs, active participation means not only being present with a webcam on, but also intellectually and interactively engaged. It involves sharing insights, asking meaningful questions, and contributing to discussions that add value to the learning experience for all participants.

2. Collaboration with Peers:

The program is designed with a strong emphasis on peer collaboration. Active participation requires working constructively with peers to solve problems, exchanging ideas, giving and receiving feedback, and contributing to a positive and respectful collaborative environment.

3. Respectful Communication:

Active participation also includes respectful communication, whether verbally during live sessions or written during online interactions. This involves listening to others, responding thoughtfully, and respecting diverse opinions.

4. Preparation for Sessions:

To fully participate, students are encouraged to come prepared to sessions, having completed any required pre-reading, assignments, or tasks. Preparedness enables meaningful contribution and facilitates deeper understanding of the session's content.

By enforcing this attendance policy, we aim to cultivate the professional skills of punctuality, responsibility, and dedication in our students, preparing them not only for their learning journey with us but also for their future careers in the tech industry.





Probation and Dismissal Policies

Academic Probation

Academic probation serves as a warning system for students whose academic performance falls below the program's required standard. If placed on academic probation, a student will work closely with the program manager to formulate an academic success plan to improve academic performance. This plan will outline clear objectives and strategies for the student to enhance their academic performance. Failure to adhere to the plan will result in further disciplinary action, including but not limited to suspension or expulsion.

Students who fail a course, or multiple courses, will be placed on academic probation and will be required to work one-onone with a Program Manager to create their mutual success plan. Students who fail to attend these required one-on-one meetings will be automatically suspended from the program.

Academic Success Plan

Students who consistently fail to meet attendance requirements or who are not meeting participation expectations will be required to meet with a Program Manager, and may be placed on an Academic Success Plan to improve their participation, attendance, and performance.

Failure to attend the required meetings with the Program Manager, or being unwilling to cooperate, will result in disciplinary action, including but not limited to failing applicable courses, academic probation, or suspension.

Leave-of-Absence Policies

Leave of Absence

In exceptional circumstances, such as severe illness or other personal reasons, a student may request a leave of absence from the program. These requests should be submitted in writing to Qwasar via an appropriate form submission, and will be reviewed and responded to on an individual basis by Qwasar.

Continuous Enrollment

Unless a formal Leave of Absence is granted, all graduate students are required to maintain continuous enrollment in two or more graduate-level (credit granting) courses, until they have completed all requirements and have received their degrees.

Student Rights and Grievances Policies

We value and respect the voices of our students. If students have any concerns or complaints, they are encouraged to express them in writing to their program manager. Each grievance is taken seriously and will be thoroughly investigated, with a formal response provided within a two-week period. If students feel their concern has not been addressed adequately, they have the right to appeal the decision by submitting it to the director of the program. The director's decision will be considered final.

Remember, the goal of our educational program is not merely to acquire a degree, but to learn, grow, and develop as a software engineer. Adherence to academic integrity helps ensure that this goal is achieved honestly and fairly.

Retention of Student Records Policies

Students have access to all of their assignments via the Qwasar platform and do not need to complete requests to access their assignments. Students have the right to request access to their educational records relating to the degree program in which they are enrolled, which largely pertains to course enrollment, course grades, and degree program progress. Students may request an official transcript. Students may request corrections if they believe educational record information is inaccurate, except where it pertains to grades or other items subject to other Qwasar policies and procedures. Information regarding academic degree records is not disclosed to external parties without the student's consent, except as required by law.

Code of Conduct



This Code of Conduct outlines the standards of behavior expected from our students in the Qwasar Silicon Valley - Masters of Science in Computer Science. This Code is designed to foster an environment of respect, integrity, and professionalism. All students are expected to conduct themselves in a manner that is conducive to the enhancement of the educational environment.

Respect for All

Our program values and embraces the diverse backgrounds of all individuals. Students are expected to respect the dignity and rights of all persons. Discrimination, harassment, or any form of disrespectful behavior based on race, ethnicity, gender, sexual orientation, disability, or any other factor is strictly prohibited.

Collaborative Learning

Collaborative learning is an essential part of our program. It is an educational approach where students work together towards a common academic goal. This method respects each student's unique perspective, values active interaction, and encourages a shared understanding of the subject matter.

Here's what collaborative learning entails in our program:

1. Group Work and Peer Learning: Our students often work in pairs, small groups, or teams to solve problems, complete tasks, or create projects. This encourages learning from peers, which can often provide different perspectives and enhance your understanding of the subject. You have the opportunity to share your ideas and insights, challenge each other's assumptions, and constructively critique each other's work.

2. Stand-Up Sessions: Stand-up sessions are integral to our program, providing students with a platform to share their progress, discuss challenges, and offer solutions. These meetings foster a sense of community, promote active engagement, and offer opportunities for peer-to-peer learning.

3. Coding Collaboration Sessions and Live Coding: During these sessions, students collaboratively work on code, solve problems, and learn from each other. They offer a platform for you to not only develop your coding skills but also your ability to work effectively within a team, to articulate your ideas clearly, and to navigate different viewpoints.

4. Respectful and Constructive Dialogue: Collaborative learning encourages open dialogue and respectful discussion. You are expected to listen to your peers' ideas, respect their views, and engage in constructive dialogue to enhance mutual understanding and learning.

5. Peer Feedback: Students are encouraged to provide and accept feedback from peers. Constructive feedback can foster learning and improvement. It's important to provide feedback respectfully and receive it with an open mind.

6. Shared Responsibility: Collaborative learning means each member of the group takes responsibility for their own learning and the learning of their group members. You should be prepared to contribute equitably to group tasks, respect deadlines, and follow through on your commitments.

While collaboration is a core component of our program, it's crucial to distinguish between collaboration and academic dishonesty. Each student must ensure that their contributions are their own, not plagiarized from others, and that they acknowledge the ideas and work of their peers where appropriate. Our program encourages collaboration that aligns with the principles of academic integrity, fostering an environment of mutual respect and collective learning.

Professional Conduct

Professional conduct refers to the behaviors, attitudes, and mannerisms that are expected from students in our program. Adherence to these guidelines ensures a respectful and productive learning environment, fostering an atmosphere of cooperation and mutual respect.

1. Punctuality: All students are expected to be on time for stand-up sessions, coding collaboration sessions, and live coding sessions. This also applies to meeting deadlines for assignments, projects, and other responsibilities.

2. Preparedness: Students should arrive at each session fully prepared. This means having completed any necessary work or readings, being ready to participate in discussions or group work, and having the appropriate tools or materials ready for use.

3. Respectful Communication: All communication, whether verbal or written, should be conducted with respect for others. This includes avoiding offensive

language, personal attacks, or disrespectful comments. You should listen to others with openness and respect, and communicate your own points of view in a way that is thoughtful and considerate.

4. Active Engagement: Active engagement involves contributing to discussions, asking questions, sharing insights, and providing constructive feedback. It also includes being attentive during sessions, showing interest in the material, and expressing a willingness to learn and grow.

5. Ethical Behavior: Students are expected to behave ethically at all times. This includes respecting intellectual property rights, maintaining academic integrity, and being honest and fair in all interactions.

6. Responsibility and Accountability: Take responsibility for your actions and work. This means following through on commitments, meeting deadlines, and taking ownership of any mistakes or failures. Be ready to make necessary corrections or improvements when needed.

7. Professionalism in Virtual Settings: In a virtual learning environment, professionalism also extends to your online behavior. This includes using an appropriate profile picture, using respectful language in chats or discussion boards, muting your microphone when not speaking during video conferences, and being respectful of others' time.

Professional conduct in our program is about treating others with respect, maintaining a positive and conducive learning environment, and taking responsibility for your own learning and actions. These values are crucial for fostering a culture of mutual respect and collaboration.

Conflict Resolution

Our program believes in maintaining a healthy and respectful learning environment. Conflict, if not handled appropriately, can disrupt this environment and hamper the learning process. Hence, it's essential to address and resolve conflicts effectively and efficiently.

1. Open Communication: At the first sign of a conflict or disagreement, students are encouraged to have an open, honest, and respectful conversation with the other party involved. Clearly express your concerns and also be open to listening to their perspective. Remember to focus on the issue at hand and not resort to personal attacks.

2. Active Listening: Active listening is critical in conflict resolution. It involves not just hearing the other person, but genuinely seeking to understand their viewpoint. Respond with empathy and make sure they feel heard and understood.

3. Seek Mutual Agreement: Try to find a resolution that is acceptable to all parties involved. This may involve compromise or finding common ground. Ensure the solution is fair and respectful to everyone involved.

4. Escalation to Program Manager: If conflicts persist and cannot be resolved at the peer level, or if they involve serious allegations such as harassment or discrimination, they should be brought to the attention of the program manager. Provide them with a clear and objective account of the issue, and cooperate with any subsequent investigation or intervention.

5. Respect the Resolution Process: Once the issue has been reported, trust in the resolution process. The program manager will investigate the matter thoroughly and take necessary action to resolve the conflict. The aim is to ensure a fair and just resolution while maintaining the integrity of our learning environment.

It's important to remember that conflicts can sometimes lead to growth and improved relationships if handled properly. They provide an opportunity for students to develop essential skills such as negotiation, empathy, and active listening, all of which are valuable in the professional world as well.

Accountability

Accountability is a cornerstone of our program. It involves taking responsibility for one's actions, learning outcomes, and the impact they have on others and the learning community. Here are the key elements of accountability:

1. Personal Responsibility: Students are responsible for their own learning, including attending all necessary sessions, completing assignments on time, and actively participating in all activities. They should seek help when needed, and be proactive in overcoming obstacles to their learning.

2. Responsibility Towards Others: In our collaborative learning environment, students also have responsibilities towards others. This includes treating others with respect, contributing to group work, providing constructive feedback, and helping to maintain a positive and inclusive learning environment.

3. Upholding Academic Integrity: Each student is responsible for upholding the highest standards of academic integrity. This includes submitting original work, properly acknowledging the work and ideas of others, and not engaging in cheating, plagiarism, or other forms of academic misconduct.

4. Adherence to Code of Conduct: By enrolling in the program, students agree to abide by this Code of Conduct. This involves following all policies and guidelines, respecting the rights and well-being of others, and behaving in a manner that reflects positively on the program and its community.

5. Consequences for Misconduct: Students should understand that any misconduct or violation of the Code of Conduct will have consequences. This may include a warning, a temporary or permanent ban from certain activities, or, in serious cases, dismissal from the program. The program reserves the right to determine the appropriate response to each case of misconduct.

6. Reporting Misconduct: Students are expected to report any observed or suspected misconduct by others. This should be done in a timely manner, and in a way that respects the privacy and dignity of all parties involved.

7. Continuous Improvement: Accountability also involves continuously striving to improve. Students should reflect on their learning, seek feedback, and use it to improve their skills and knowledge. They should also contribute to the improvement of the program by providing constructive feedback and suggestions.

Accountability in our program is about taking responsibility for one's actions and learning, respecting the rights and well-being of others, and upholding the values and standards of the program. It's about fostering a culture of integrity, responsibility, and continuous improvement.

About A Look Under the Hood

About Our Programs

We offer elite and specialized programs in six major tech talent areas including software engineering, full stack development, Al/Machine Learning, Data Science, DevOps/Cloud Engineering, and Claris Filemaker app development. These six areas enable students to focus on the topics they enjoy and build the projects they're passionate about. Qwasar programs are tough, hard work, but an incredible opportunity to fuel a career in the tech world.

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Fostering a Learner Community.

Our Values and Principles



Why we do what we do

When you join Qwasar, you enter a new way and world of learning, as well as a new community. We're united by common beliefs about the future, about how people learn, and by a respect for toplevel coding.

We are a community that is focused and committed to lifelong learning. We incorporate skills-development for the purpose of gaining valuable and marketable skills for the future. Since technology is constantly changing, we want to stay ahead and train for what the future may bring.

Our community is actively engaged with one another and sharing current events in the technology industry.

Students have better success rates by staying accountable in our meetings and to their peers and encouraging one

another. Everyone started at a different level but with minimal understanding of complex concepts. They grow and learn and thrive through this program and can offer support and mentorship to those who come after them.

It is fascinating to see where students are just one, three, and even six months into their program. Things that seemed daunting to them back then became incredibly easy. They become efficient at communicating with one another and enjoy the learning process. They are confident that growth and improvement is happening daily.

Students come for the learning and stay for the community.

Belief in the power of education

Our community is full of learners who enjoy learning. They believe that the skills-development will lead to their future success and that hard work is a key component.

Freedom and opportunity in a digital world

By having the ability to code, you are giving yourself marketable skills to be successful in the digital world. You can work for a variety of companies and industries in many different facets.





A focus on learning and growth

We are dedicated to making sure each student has ample opportunities to grow and learn within our programs.



A belief that you are capable of succeeding

Students at Qwasar have grit and that helps them in working hard and acknowledging the power of their learning. They know how to succeed and can visualize the future.

Our Learning Methods

Project-Based Learning 202

Project-based learning is an approach to how a person learns that involves providing projects or problems that need to be solved, built, or created. Project order, size, complexity, and structure matters! Our programs are structured such that projects start with basic concepts then become increasingly more difficult and more complex. This reflects a learner's zone of proximal development. One of the most important things you need to learn to future-proof yourself is how to learn: unless you're doing real project-based learning, you will depend on someone else to provide answers for you.

Peer Learning

jobs.

Gamification

Qwasar uses 6 elements of gamification in learning that are designed to work together to both direct and motivate learners. Economies, levels, and skills help learners to navigate their own learning and their new technical world while simultaneously allowing them to feel and take confidence in how far they have progressed and what they're capable of doing.

The reward that comes with finishing a project, plus the responsibility of using correction points wisely, encourages learners to take ownership of their learning, submit work with minimal errors, and progress through their tracks.

Role-Play

Learners practice work they would do in a job before they get employed, meaning we, they, and employers can have confidence that learners are workplace-ready. Each learner will act as the interviewer and interviewee in peer code reviews to understand both roles.



Students learn in being reviewed and in reviewing, and are operating at the top four levels of the skills pyramid. They must evaluate, analyze, think critically, and create ways to break the submitted solution and construct tests. The peer review process naturally fosters 21stcentury skills. In giving and receiving peer reviews, students learn how to communicate about their work and how to give and receive feedback. This is important for developing soft skills as well as preparing for the workplace where peer reviews are generally part of tech

Admissions The Application Process at Qwasar

To apply to Qwasar, please complete an application online at Qwasar.io/Apply.

Applicants must be located in North America and hold at least a high school diploma or GED.

We do not accept applications from Uzbekistan, Kazakhstan, Ukraine, Cameroun, Nigeria or Niger as we already have partners in these countries who are better suited and equipped to serve students in these regions.

What to Expect

To apply to our programs, expect the following steps:

- Step 1: Submit your application online.
- Step 2: Our committee reviews your application
- Step 3: You will be sent a Hackerrank test
- Step 4: Following a passed Hackerrank test, you will be sent a personality and IQ test
- Step 5: Following a passed personality and IQ test, you will be sent a take-home assignment
- Step 6: Following a passed take-home assignment, you will be invited to a technical interview with the Qwasar team
- Step 7: Following a successful interview, you will be sent an offer letter

Step 8: If you choose to accept the offer letter, you will be sent an enrollment contract and instructions to make your program payment in full.

Following a successful application and enrollment, you will be expected to attend orientation, virtually of course!

4-year CS Degree	4-year other degree	No 4-year degree
 Resume Technical portfolio, with Git links 2 references Cover letter/personal statement Hackerrank Technical Interview Take-home assignment 	 Resume Technical portfolio, with Git links 2 references Cover letter/personal statement Hackerrank Technical Interview Take-home assignment 	 Resume Technical portfolio, with Gilinks 2 references Cover letter/personal statement Hackerrank Technical Interview Take-home assignment

Tuition Costs and How Payment Works

Qwasar Master Degree programs cost \$33,000 total per program. Scholarships are available for most students. Our goal is to make the program affordable and competitive. Scholarship information will be available on https://qwasar.io.

Program payments will be due in full before October 2nd. You can pay by Stripe using instructions in the email we send after you are enrolled.

Financing is available through Meritize.





Full Time Monday to Friday, 9a - 5p

Our full-time program meets virtually 1-3x per day, and often includes live coding sessions, coding collaboration sessions, pair programming sessions, and interviews with industry professionals. You are expected to work about 40 hours per week, which includes meeting times. Those who cannot attend Monday to Friday should not apply for the full-time program. Learners with full-time jobs will not be accepted into the full-time program.

Part Time Tuesday evenings and Saturday

Our part-time program meets virtually 1-3x per day on Tuesdays and Saturdays, and includes live coding sessions, coding collaboration sessions, pair programming sessions, and interviews with industry professionals. You are expected to work about 15-20 hours per week, which includes meeting times. Many people in these programs have part-time or fulltime jobs.

Please note: All program costs above are for learners in our programs ONLY in the United States and Canada.





Scholarships

Some options available

There will be scholarship opportunities available for students who qualify. There are 9 types of scholarships currently available, which can be found on the next page. These include: Jedi Scholarship, WALL-E Scholarship (for anyone going into green tech), Law of Surprise scholarship, Asgard scholarship, Samantha Carter scholarship (for women), This is the Way Scholarship (diversity focused), Skynet Corporation Fund Scholarship (for AI/ML applicants), Left-handed scholarship (for left-handed people), and the TRON Scholarship (for people going into blockchain).

Scholarships

Qwasar has at its disposal funds to support scholarships for many of our applicants. This is part of our mission to make education accessible, and to improve long-term career growth and opportunities for learners globally in an ever-growing tech field.

We encourage all program applicants to also apply for a scholarship. Currently, Qwasar has 9 scholarships available:



Jedi Scholarship

Do you consider yourself a warrior-monk? A fighter who doesn't give up but who seeks to keep the peace? The Jedi Scholarship is for students who match the Jedi spirit, and who are one with coding. May the Code be with you.

WALL-E Scholarship

The Wall-e Scholarship is for students who are interested in a career in the green industry, and specifically in green technology. Wall-e scholars will be required to complete their Thesis and Capstone Project on a subject related to the use or application of software technologies in the green industry, with a view of getting a job in this area.

Law of Surprise Scholarship

A nod to Geralt, the Law of Surprise Scholarship evokes a similar concept to the law itself: a scholarship given that cannot in the moment be repaid, and thus Qwasar will invoke the Law of Surprise, not knowing what will be given to us upon return. Qwasar will ask Law of Surprise Scholars for various items in return: participation in an alumni panel, referring a Qwasar candidate to a job at their current company, participation in a student/ alumni article/interview for the blog, or similar.

Asgard Scholarship

The Asgard Scholarship is for learners who are like the Asgard - incredibly smart. The advanced technology built by the Asgard is in part what we hope recipients of this scholarship will achieve in their lifetime: significant technical contributions to society.

This is the Way Scholarship

Education and training should be accessible to everyone. If you're willing to work hard, we are willing to train you. This is the Way.

Skynet Corporation Scholarship (AI/ML)

How can you have an AI/ML program and not have a reference to one of fiction's leading neural networks? The Skynet Corporateion Scholarship is for students who are interested in a career in AI/ Machine Learning. TRON scholars will participate in our Deep Learning Engineering Lab, and be required to complete their Thesis and Capstone Project on an AI/ML-related subject.

Left-handed Scholarship

Are you left-handed? This scholarship is for you!

TRON Scholarship (blockchain)

A nod to TRON (original and remake), and to the blockchain protocol, the TRON Scholarship is for students who are interested in a career in blockchain. TRON scholars will participate in our Blockchain Engineering Lab, and be required to complete their Thesis and Capstone Project on a blockchain-related subject.



Samantha Carter Scholarship

In honor of one of the leading ladies of a great television series, the Samantha Carter Scholarship is for students who embody the mind and spirit of Carter: a sense of discovery and adventure, fantastic intelligence, and a friendly smile.

How to Apply

Once you have been accepted to the Qwasar Masters program, please fill out the scholarships that you wish to apply for on the separate form that is located in your acceptance email.

FAQ's

O1-How are applications reviewed/ application processed page, the processed page, the processed page, the processed page. The processed page application processed page application processed page application processed page. The processed page application processed page application processed page application processed page application processed page. The processed page application processed page

02-When is the application deadline?

03-Are applications completed after the deadline considered?

04-Is there an admission interview?

05-Who do I contact with application questions?

06-How long does it take to complete the Masters program?

07-What should I do after being admitted?

08-What courses are offered?

09-Do I need a BS to participate in this program?

10-Can I complete the part-time program faster? All applications will be reviewed and processed by the Qwasar committee. As detailed on our application processed page, the process includes a Hackerrank test, personality and IQ test, take home assignment, and technical interview.

The application deadline for the October 2nd cohort is September 12th, 2023.

All applications completed after September 12th will not be considered for the October 2nd start date. We can contact you about future program start dates in 2024.

Yes, if applicants pass the prior rounds in the application process, they will be invited to a technical interview.

If you have any questions during the application process, please email Jennifer at jennifer@qwasar,io or submit a contact form on our website.

The program duration is 12 months for full-time students and 24 months for part-time students.

Congratulations! The first step is thoroughly read through all instructions on the admissions material we send to you via email. Also, you will need to make your program payment before your start date.

Please refer to our course descriptions on page 16 for a full list of our offerings for each specialization.

No, a Bachelor's degree is not required, but significant commitment along with a high school diploma or GED. Also, a minimum requirement is that you have previous coding experience in at least 2 programming languages as well as a minimum understanding of the software development lifecycle, command line, data structures, and algorithms.

Yes, you can progress through the curriculum at your own pace. If you complete the assignments faster than the estimated time, you will complete the part-time program in less than 24 months.

11-Is there an orientation for new students?

12-What materials are required for the program?

13-What if I work parttime/full-time?

14-What are the admission requirements?

15-How can I check the status of my application?

16-Is there an admission deposit required?

17-Does the MSCS degree accept international students?

18-Are there opportunities for networking?

19-How do I register for classes?

Yes! All new students will be required to attend a mandatory orientation on the first day of the program. This will include getting set up on the platform, meeting your peers in your cohort, getting to know your program managers, and starting on your first project.

A computer and webcam are the only two materials needed for this program. This program uses software that will work on a Chromebook. You do not need to purchase a powerful computer in order to complete this program. You will need stable internet access and a good connection, however, in order to participate and learn in this program.

If you work full-time, you will be unable to enroll in our full-time program. We do not recommend enrolling in our part-time program unless you are able to commit to all program meetings on a consistent and ongoing basis. If you work part-time, it is up to you to determine if the schedule works with your prior commitments. All program meetings are mandatory and it is important to dedicate time to coding during the week to ensure progress and long-term success.

The minimum requirement is that you have previous coding experience in at least 2 programming languages as well as a minimum understanding of the software development lifecycle, command line, data structures, and algorithms. Also, you need to have a high school diploma/GED.

The application process for the MCSC at Qwasar is multi-step and will involve an application form, Hackerank test, personality/IQ test, take-home assignment, and a technical interview. Please refer to all email communications from Qwasar to see the most recent update on your application. It is important to be timely in submitting all tests and assignments during the process.

No. Program payment is due in full prior to your start date.

Yes, there are countless opportunities to work together with other developers within the greater Qwasar community throughout the program. There are occasionally DevTalk events, guest speakers, and alumni who speak about their experiences at top tech companies and navigating the industry.

When you apply for the MSCS degree, you will choose your specialization: Software Engineering, Full Stack Development, or AI/Machine Learning. Once in that track, you will have the opportunity to choose certain topics for your thesis and capstone to guide your learning and curriculum towards your future career goals.

Yes, this program accepts international students pending application review.





Join a motivated learning community that loves to code.

2023 cohort starts October 2nd for Full-time and October 3rd for Part-time.



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