WELCOME TO

Udacity Connect Intensive

UDACITY

Student Handbook

Welcome to Udacity Connect Intensive! To help you make the most of the program, we've put together this Student Handbook - please read through before your first session.

About Udacity Connect Intensive

Udacity Connect Intensive combines the online Nanodegree program with in-person learning sessions to keep your cohort on track to graduating in just four months. Your cohort's first session is the Saturday, October 7; a detailed program schedule is included later in this Handbook. As your cohort goes through the Nanodegree program at an accelerated pace, you'll have access to in-person mentoring, peer support and feedback, and group accountability.

You'll meet every weekend with your cohort and Session Lead for group work and short lectures, every Saturday from 10am - 3pm, with two hours of open study time with your peers and Session Lead until 5pm. You will be expected to work independently, as needed, for 10-15 hours a week on your Nanodegree program.

What if I can't make a session?

We expect you to attend every session but understand that sometimes life gets in the way. In the event that you need to miss a session, please let your Session Lead know as soon as possible. Being that the class is moving at such an aggressive pace, missing sessions will cause you to fall behind - working with your Session Lead will be crucial to making sure you stay on track to graduating on time.

If you have any questions or concerns, please email: uconnect-support@udacity.com

What to Bring

Remember, you will be spending the majority of your session working on your Nanodegree program, so bring your laptop, power cord, and whatever else you find helpful when working on your Nanodegree program. Also, unless otherwise told, bring your lunch!

Code of Conduct

As a participant in the Udacity Connect Intensive program, you have the unique experience to be a part of a cohort of highly motivated peers to collectively reach Nanodegree graduation at an accelerated pace. Your peers will be your support system and your community. You will learn from, teach, encourage, provide constructive feedback to, and inspire each other. Keep the following community guidelines to make the most of your experience:

Collaborate.

Help each other learn by asking and answering questions, and trying solutions together. With Udacity Connect Intensive, you have the unique opportunity to test, apply, and practice what you've learned with your peers. As many students will tell you, just working through the course exercises once won't truly solidify your knowledge – like any new skill, you'll have to practice to get good.

Be aware of plagiarism, though! While we encourage you to work together, learn from each other, and even share your different approaches to a solution, all projects you submit for your Nanodegree portfolio must be your original work. Any code that you use for reference must be cited. If you are working closely with a fellow student, consider using the following strategies to avoid copying each other's work:

- Talk through a solution together, and go through examples, but when it comes time to write the actual code, do it separately, where you can't see each other's screens.
- Never copy/paste any blocks of code, and make sure you understand what you are typing. If you're writing a line of code, and you don't know exactly what it does - ask!
- Work through the problem together, perhaps sketching out 'pseudo-code' then take an hour break before writing the actual code on your own - this doubles as reinforcement of what you learned!

Respect.

Throughout the program, you'll be able to learn from and witness firsthand the wealth of diverse perspectives that make up our cohort. We celebrate our differences, and don't expect all students to have the same perspective. However, we do expect that all students will treat each other and their Session Lead with respect and help create a positive learning environment. Here are a few things we can all do to make this a great space to learn:

- Don't act surprised if someone asks a question when the answer is "obvious" to you. For example, exclaiming "You don't know what a 'variable' is?!" makes the person who asked the question feel silly, and doesn't encourage them to ask other questions. Remember that at some point, you also didn't know the answer, but since now you do, you have to opportunity to share your knowledge!
- React with empathy when someone is frustrated.
- Remember that everyone here has good intentions and wants to learn and to help others.
- Don't use inflammatory language. Bring others up, not down.

Network/Engage.

You're not here just to get through the Nanodegree program; you're here to also build your network. Take the time to engage with your cohort and Session Lead. Getting to know other Udacians will help

build up your professional network. Use this opportunity to learn from their experiences and share your own.

Consequences for Violations
Udacity reserves the right to suspend community privileges for students that break this code of conduct, either in letter or in spirit. This may include asking the offending party to issue an apology, or removing the offending party from the Udacity Connect program itself.

Udacity Connect Intensive Weekly Program Schedule

Weekend	Session	Homework
OCT 7	Thinking Like a Machine Learnist	In the **Machine Learning Foundations** part of the online syllabus, complete the following modules: ● Welcome to the MLND program ● What is Machine Learning? ● MLND Program Orientation Finish the **Exploring the Titanic Survivors' Data(P0)** project.
OCT 14	Model Evaluation and Validation	Finish the following lessons in the Machine Learning Foundations module: ● Training Models ● Testing Models ● Evaluation Metrics ● Detecting Errors ● Putting it all together ● **Practice Project: Bayesian Learning - Build a Spam Classifier** Review the **Predicting Boston Housing Prices** project.
OCT 21	Model evaluation and validation	Complete and submit the **Predicting Boston Housing Prices(P1)** project. In the **Supervised Learning** part of the online syllabus, complete the following modules: ● Review of the Spam Classifier practice project. ● Supervised Learning Intro ● Introduction to Regression, More Regressions, Regressions in sklearn ● Decision Trees, More Decision Trees ● Neural Networks, **do not do the Neural Nets**

		Mini-Project as this will be covered in session next week.
OCT 28	Supervised Learning	Finish the following modules under **Supervised Learning**: ● Math Behind SVMs, SVMs in practice ● Instance Based Learning ● Naive Bayes, Bayesian Learning, Bayesian Inference, **do not do Bayes NLP Mini-Project lesson as this will be covered in session next week.** ● Ensemble B&B Review the **Finding Donors for CharityML** project.
NOV 4	Supervised Learning: Building a Classification System	Finish and submit the **Finding Donors for CharityML(P2)** project. In the **Unsupervised Learning** part of the online syllabus, complete the following modules: ● Introduction to Unsupervised Learning ● Clustering, More Clustering, Clustering Mini Project:**do not do the Clustering Mini-Project**; this will be covered in session next week. ● Feature Scaling, Feature Selection.
NOV 11	Principal Component Analysis	Complete the following modules under **Unsupervised Learning:** ● PCA, PCA Mini-Project: **do not do the PCA Mini-Project lesson**; this will be covered in session next week ● Feature Transformation Review the **Creating Customer Segments** project.
NOV 18	Unsupervised Learning: Data Clustering	Complete and submit the **Creating Customer Segments(P3)** project. In the **Reinforcement Learning** part of the online syllabus, complete the following modules ● Intro to Reinforcement Learning ● Markov Decision Processes
NOV 25 - NO CLASS		
Dec 2	Reinforcement Learning	Finish the following modules under **Reinforcement Learning**: ● Game Theory ● More Game Theory Review the **Train a Smartcab to Drive** project.
Dec 9	Reinforcement Learning	Finish the **Train a Smartcab to Drive(P4)** project.
Dec 16	Deep Learning	Finish the following module under the Deep Learning module:

		• Deep Neural Networks
Dec 23 - NO CLASS		
DEC 30 - NO CLASS		
Jan 6	Convolutional Neural Networks	Finish the following module under the Deep Learning module and review the Dog Breed Classifier project: • Convolutional Neural Networks
Jan 13 - NO CLASS		
Jan 20	Build a Dog Breed Classifier	Complete the **Deep Learning project: Building a Dog Breed Classifier(P5)** project.
Jan 27	Capstone Proposal	Finalize and complete the **Capstone Proposal(P6)**. Prepare a ~10/15 minute presentation (speech, powerpoint, etc.) on your implementation to your cohort for next week's session.
Feb 3	Capstone Project Presentations	Work on your **Capstone Project(P7)**.
Feb 10	Capstone Project	Work on your **Capstone Project(P7)**.
Feb 17 - NO CLASS		
Feb 24	Final Capstone Project Presentations	**GRADUATE!**

Housekeeping Rules

The location of your Udacity Connect Intensive Sessions will be hosted at a Breather site located at 433 Natoma #301, San Francisco, CA, 94103. Below are general housekeeping rules to remain in good standing with both Breather and Udacity:

- During your session, you will strictly be working on your Nanodegree program and related materials.
- You will stay in designated areas during the session.
- You will not touch nor use things that do not belong to you.
- You are responsible for retrieving all personal items before leaving your session.
- You are responsible for leaving all areas in a clean and tidy condition - return all furniture to original places and do not leave trash lying around.

Connect Careers

With Udacity Connect, we want you to be supported in your new career, landing a new job, getting a promotion, or simply feeling more confident in your current role - whatever goals you have for your career! Being proactive is one of the most important parts of a job search. It is you, and not Udacity nor any other company, that goes into the interview room and cements the job offer. You need to be applying to every job lead you see. Know that we are here to help you along the way. What we provide is Nanodegree content that will give you in-demand skills, Nanodegree projects that will demonstrate those skills, and career services that will show you how to communicate your skills to the tech industry (in how

to format your resume, how to answer technical interview questions, etc.), attract recruiters, and successfully pursue job leads.

Udacity Career Services
With our online Nanodegree programs at Udacity, we have a team of people that can help review your resume, cover letter, Github, and LinkedIn. We also have a team of career coaches that can help get you prepared for your career journey and long term career goals. We can also help you work on your elevator pitch so that you're ready to talk to recruiters and peers about your new skills, what you're looking for, and showcase your projects and abilities. You can find more information about Udacity Career Services at the Career Resource Center.

The Connect Advantage
In addition to the Udacity Career Services, with the Connect In-Person Nanodegree program, you will have exclusive access to guest speakers who are industry experts and can help you navigate the world of your new field. We will also hold in-person events, that are only available through your Connect Program.

1:1 Support
In your Connect Nanodegree, you'll have access to 1:1 support with Udacity staff for your career goals. This could be 1:1 calls, or simply having someone to email and ask questions. We've found that having that accountability and someone to check in with really helps with motivation and staying on track when it comes to networking, applying for jobs, and interviewing.

Frequently Asked Questions

What happens if I can't keep up?

Continue to work with your Session Lead to the best of your ability to continue to get the most of out of sessions. Email uconnect-support@udacity.com if you have any questions or concerns.

What happens after my last session?

The goal of the Udacity Connect Intensive program is to get you to graduate from the Machine Learning Engineer Nanodegree program by your last session date. To graduate from the Machine Learning Engineer Nanodegree program you must meet specifications on all projects.

Please aim to meet specifications on all projects by your last session date. After your last session, we will give you a one-month grace period in which you will continue to have access, regardless of your graduation status, to the Nanodegree content and will have the ability to submit projects for review. After the grace period, we will remove your access to Nanodegree content - you will not longer have the ability to submit projects for review. Students who have already graduated by then will continue to be able to view Machine Learning Engineer Nanodegree content (in general, graduated students continue to have access to the Nanodegree after they graduate).