Course Title

The Berlin Music Tech Startup Scene

Course Number
REMU-UT 9813 D01

Instruction Mode: In-Person

Spring 2022

Lecturer Contact Information
Matthias Strobel | he/him/his
matthias.strobel@nyu.edu (ms13864@nyu.edu)
+49 160-7542639

Your instructor will inform you about the learner hours (one-on-one meetings).

Prerequisites
This course does not have any prerequisites.

Units earned
2

Course Details
Class meetings: Wednesdays, 2:00 pm to 4:45 pm

Location: Rooms will be posted in Albert before your first class. Zoom links for remote classes will be posted on Brightspace.

In the interest of protecting the NYU Berlin community, we are closely following guidance around COVID-19 from the Robert Koch Institute (Germany's institute for

disease control and prevention), the Centers for Disease Control and Prevention (CDC), the World Health Organization, and the New York City Department of Health and Mental Hygiene and adjusting our recommendations and policies accordingly. Your health and well-being is our top priority. Please consult the [NYU Berlin Resource Page](#) frequently for the latest information. You are required to adhere to the most recent policies.

You will be assigned a seat on the first day of in-person classes and are expected to use that seat for the entire semester due to NYU COVID-19 safety protocol. Please note that you are expected to attend every class meeting in-person, unless it is a remote-only class. This may change at any point during the semester if local COVID-19 regulations require additional physical distancing. In case of the latter, in-person students may be split into cohorts who will attend alternating sessions.

Course Description

The value chain of music is driven by technological solutions today more than ever. Inevitably the music ecosystem keeps changing and new solutions will rise from the bottom up, initiated by creative and passionate entrepreneurs. As a place of constant change which provides a unique environment for cultural experimentation, Berlin attracts artists and visionaries from all over the world. Equipped with various expertise in different disciplines and inspired by the diversity, creativity, and freedom of the city, many have joined forces, and transformed a once experimental scene into a professionalised and vibrant field of businesses. Globally successful music-tech start-ups like Ableton, Native Instruments or Soundcloud which were founded in Berlin pushed this city to the forefront of innovation in the music industry, and made Berlin a hotspot and one of Europe's most fertile grounds for innovative music tech startups which embrace and foster digital change in the music ecosystem.

This course examines innovation brought to the music industry by Berlin-based startups and entrepreneurs that made a sustainable impact with their solutions, and analyzes its effects on the global music ecosystem. Students will hear first-hand experiences from music tech entrepreneurs who will talk about their journey and discuss the opportunities they discovered and the challenges they had to overcome in order to be successful. This course will give students a holistic understanding of the music tech ecosystem and the requirements needed to pursue a career as a founder in music tech in Berlin.

Course meetings are divided into two parts.
1) Technological Impact and Entrepreneurship: At the beginning of each lesson, we will examine the origins of and technological developments in certain areas of the music value chain with a focus on the disruption which startups have created

during the last centuries. We will also go through important elements of the toolbox a founder needs to be equipped with. These sessions will combine lectures, presentations, and discussions to explore the present status quo and potential future evolution of the music ecosystem, as well as opportunities for startups in the music tech sector.

2) Founder stories: Becoming a founder in the rapidly changing world of music tech comes not only with challenges, but also with new opportunities. Through office visits at startups, successful entrepreneurs will share their knowledge through inspiring, personal and insightful stories and open discussions with the students.

Course Learning Outcomes (CLOs)

By the end of the course, students will be able to:

- Gain a critical understanding of the history of music technology.
- Explain the music value chain with attention to qualitative and quantitative attributes of technology and its potential adaptation to music.
- Explore the business aspects involved in developing products or services for the (digital) music ecosystem.
- Recognize the broad variety of the music tech ecosystem in Berlin and beyond.
- Identify the core characteristics and entrepreneurial mindset of startup founders and the in- and outside obstacles threatening a startup in music tech.
- Identify different career and business opportunities, and develop a strategy to enter into and succeed in the music tech sector.
- Assess the risks of becoming an entrepreneur and gain confidence to innovate the music value chain with your idea to effect change.
- Connect to the Berlin music tech (start-up) scene and build long-term, meaningful relationships with innovators.
- Acknowledge the importance of safe spaces in cities and communities for creative freedom and diversity to unfold.
- Learn that experimentation can lead to innovation.
- Appreciate transdisciplinary exchange and the impact of interdisciplinary teams.
- Navigate new and unfamiliar spaces with empathy and resilience.
- Apply this knowledge to your professional life and your plans as an aspiring entrepreneur.

Course Approach to Teaching & Learning (CATL)

The course approaches entrepreneurship in the Berlin music tech startup scene by highlighting the impact of innovation for the music ecosystem in lectures and by learning from the first-hand experiences of music tech founders through visits to their offices and by engaging with the music tech community in Berlin.

To analyze individual students' abilities and commitment to the course, students are actively invited to share their pre-existing experiences, knowledge, and insights about

music tech with the class. The course embraces a view of the individual differences of founders in music tech and their professional backgrounds.

The goal is for students to develop an understanding of the basic mindset, knowledge, and skill set required to pursue a career as an innovator and entrepreneur in the field of music tech by observing and actively engaging with a diverse variety of founders who are accelerating change in the music sector.

To provide clear, actionable, and timely feedback, students are invited to anonymously fill out an informal form after each course session to articulate critical feedback about the lecture and guest speakers. This feedback will be discussed at the beginning of the following session.

Assessment Components

Class Participation - 20%

Everyone is required to participate in class discussion, present arguments and ask questions of the instructor and guests. This course relies on the engagement of students with the instructor, and especially with the guests. If there is something you do not understand, or if an idea comes to mind, do not hesitate to ask.

Critical Response Papers - 40%

There are two analytical response "entries" to the class discussions. The dates for those discussions will be announced in the first session and on Brightspace. Response papers are due no later than one week after the respective class discussion, to be submitted electronically and in printed form at the start of the next class. Each response is worth 20%.

Your responses should be genuine, informed, thoughtful and critical. Critical means that you must not regurgitate the facts, but you must provide your unique take on the guest visit. What did the speaker – good or bad – make you think about music, about technology, about the start-up scene, about audiences, about yourself, etc. What was significant – or not significant – about a guest's conversation? You should cite and incorporate at least two articles in your response. Each paper should be 500 words; double spaced or 1.5 spacing, 11 or 12 point font serif, A4 paper (A4 will set margins automatically), white paper, black ink, computer-generated.

Team Project - 40%

At the beginning of the course, your lecturer will provide you with an overview of emerging technologies that may be applied to music and its industry. For the Team Project, you are asked to form groups to create a business-concept for a product or service which is based on one of those technologies. Examples might be additional income streams for musicians, new ways for fan engagement, live performances or

music production. Each team is responsible for researching and analyzing the potential of the chosen emerging technology and the impact it can have on the music ecosystem in the future. The final concept case should highlight the importance of either the creative and artistic aspect of the technology for musicians or economic value creation opportunities for artists and music companies. Your lecturer will help you to form the teams, begin setting goals and plan the overall Team Project. Once the groups are formed, teams will have to self-organize their structure and distribute tasks among each other. Teams are required to meet at least once with the lecturer during the course but they may request additional meetings. Each team will present what they have developed in an oral presentation (supported by visuals) at the end of the semester, accompanied by a hand-out document of a maximum of two pages. Additionally, each student must send the lecturer a one-page-long self-reflection report on how the project went, how the group functioned as a project team and what they contributed individually to the project.

After the last course module, all students will receive explicit individual feedback about the case they presented and their performance.

Failure to submit or fulfill any required component may result in failure of the class.

Required Text(s)
All information about texts to read and videos to watch can be found on Brightspace Electronic Resources (via Brightspace / NYU Library Course Reserves).

Please follow this link for the [NYU Berlin Library Catalogue](#) or the link on NYU Berlin's website (Academics/Facilities & Services).

Additional Required Equipment
none

Course Structure

Class #1: 23 Mar 2022 | 2 pm – 4:45 pm
Introduction to the Course and Exploration of Innovation in Music Tech
This session is dedicated to a general introduction to the course and a deep dive into the history of technological innovation within the music ecosystem. We will talk about personal experiences with music technology and examine the evolution of the music value chain and the overall impact music tech has had on the music ecosystem

during the last 200 years. At the same time, we will focus on how Germany, and Berlin in particular, have impacted the music ecosystem. In the second half of this class, students will choose the topic for the team project and form groups in which they will execute the chosen project until the last class on May 4.

Read
- [Gardner Lifecycle on Emerging Technologies](#)

Watch
- The documentary "The Start-up Kids" on [NYU's Kanopy Streaming](#)

Learning Outcomes: revisit the most influential music technology inventions and gain a critical understanding of the (recent) history of music technology; understand the impact technology has had and still has on music, its value chain and the broader ecosystem; differentiate between passion-driven startups and problem-driven innovations in the music industry.

Class #2: 30 Mar 2022 | 2 pm – 4:45 pm
Music Cultures & Communities
At the beginning of this class, we will discuss open questions about the team project. We will then investigate startups which have built different forms of creative communities and analyze their vision and value creation/business models. We will look into different forms of incentives for communities to thrive and the importance of diversity in the music ecosystem, as well as in the startup scene. In the second part of the class, Oscar Atanga from [Black Artists Database](#) (BAD) will visit us. He will take us on a journey through his personal professional life, the story of BAD and what their vision for the future is in an open discussion with the students.

Read:
- Kevin Kelly "[1.000 True Fans](#)"
- Li Jin "[1,000 True Fans? Try 100](#)"
- Elias Leight "[The Music Industry Was Built on Racism. Changing It Will Take More Than Donations](#)"

Learning Outcomes: understand the difference between B2C and community engagement; identify different business models; learn about the challenges of building communities with respect to different cultures; evaluate income opportunities for artists.

Class #3: 6 Apr 2022 | 2 pm – 4:45 pm
The Perfect Pitch
In this session, we will explore two essentials of a founder's toolbox. The Business

Model Canvas and the startup pitch. We will work with the Business Model Canvas on an example case and analyze the fundamental aspects of a pitch deck for startups. We will talk about the importance of presenting an idea convincingly and exercise how to persuade investors and the jury of pitch competitions.

Read
- "The Business Model Canvas: Let Your Business Thrive with This Simple Model" by 50 Minutes

Watch
- The Pitch Doctor "Berlin Pitch"

Learning Outcomes: understand the Business Model Canvas; learn how to create the perfect pitch deck; analyze the different aspects of selling your business concept either to investors or other audiences; evaluate key parts of live presentations; gain knowledge about the importance of body language.

Class #4: 13 Apr 2022 | 2 pm – 4:45 pm
Music Creation Tools
During this session, we will explore the evolution of musical instruments, and their impact on creative expression, education and performances. We will analyze the impact of technological advancements on the music industry and listening habits of consumers. In the second part of the class, we will talk with Stephan Schmitt, founder of Native Instruments and Nonlinear Labs. Native Instruments develops, manufactures, and supplies music software and hardware for music production, sound design, performance, and DJing. Nonlinear Labs is dedicated to building advanced electronic instruments for performing musicians, focusing on playability, expressiveness, quality, and durability.

Watch
- The Art of Listening

Learning Outcomes: understand the impact of technology on musical expression and the most influential music technology inventions throughout history; recognize the broad variety of musical instruments; learn from founders about their mindset and startup story.

Class #5: 20 Apr 2022 | 2 pm – 4:45 pm
Startup Safari
In this class, we will go on a field trip and visit music tech startups in Berlin at their offices. Founders and employees will share their stories and discuss the vision for their startups with the students. We will visit the offices of [Patreon](#) and [MOD Devices](#) at [House of Music](#) , and [Yabal](#) at their HQ.

Read
- Excerpt: "[How Berlin went from almost bankrupt to techno capital](#)" by Kristine Mitchell
- "[Why music tech startups choose Berlin](#)" by Berlin Partner
- [Statistics and Resources about "Berlin, Germany's Music Tech Capital"](#)

Watch
- "[MusicTech Berlin](#)"

Learning Outcomes: understand the challenges and benefits of founding a startup in Berlin; learn about different business models from music tech startups; get insights on how it is to work in a music tech startup; connect with the Berlin music tech startups scene.

Class #6: 27 Apr 2022 | 2 pm – 4:45 pm
Music Recommendation
At the beginning of class, we will reflect on our visit to the startups in the last session. In this class, students will share their approach to music selection and we will discuss the influence of algorithms on listening habits. Jakob Höflich, founder of [Cyanite](#), a startup that develops solutions for music recommendations will share his journey with us and discuss with the students the future for algorithms that shape our musical taste.

Read
- "[How AI helps Spotify win the music streaming world](#)" by Ipshita Sen:
- "[Spotify's Discover Weekly: How machine learning finds your new music](#)" by Umesh A. Bhat:

Watch
- "[How Algorithms Can Influence your Favorites](#)" by Christian Steinmetz at TEDxClemsonUniversity
- "[The Role of AI in Creativity](#)" by Douglas Eck at TEDx GunnHighSchool

Learning Outcomes: learn the capabilities of recommendation algorithms; understand the impact of an artist's success; explore the influence of machine learning and artificial intelligence on music selection; recognize the benefits of collaboration between researchers and entrepreneurs.

Class #7: 4 May 2022, | 2 pm – 4:45 pm (Final class)
Future Technologies and Final Group Presentations
At the beginning of this class, we will analyze the conversation with the founder who visited us in the previous class. Students will then present the final team projects. Results will be discussed with the class and potential future scenarios will be evaluated.

No reading or watching materials. Students shall focus on the final team project presentations.

Learning Outcomes: examine present technologies that can be used in the music ecosystem; evaluate opportunities for artists as well as founders; exercise how to pitch an idea convincingly; understand the application fields for emerging technologies within the music sector and other industries that could potentially benefit from them; train your presentation skills.

Recommendations for a Positive Teaching and Learning Environment
In order to make this course the best possible experience for everyone, please make sure to silence and put away phones and similar distracting and noise making devices during class, office visits and events. Text messaging, emailing, and other external communication is not permitted during class. Eating, drinking, or sleeping in class is not allowed. Computer-based note taking must be done quietly. Please make sure that built-in speakers do not emit sounds. Students should remain engaged during class and take notes during office visits at companies and events, as well as maintain digital copies of all disseminated presentations and documents. Make sure to be punctual.

NYU | BERLIN

Your Lecturer

Matthias Strobel is the President of [MusicTech Germany](#), the Federal Association for Music Technology in Germany, and founder of [Wicked Artists](#), a booking agency for creative technology and new media artists. He is Germany's main point of contact for music technology innovation and his network of entrepreneurs, industry executives, researchers, and his connections to (inter)national policy makers make him one of Europe's renowned experts in that area. Matthias Strobel works as a consultant, mentor, and independent manager to help accelerate avant-garde approaches from startups. Determined to further the innovative potential – and thus future success – of artists and entrepreneurs, he uses his experience and leverages his network to help create the music ecosystem of tomorrow. Strobel has given lectures at Berklee College of Music Valencia, Norwegian University of Science and Technology Trondheim, Popakademie Baden-Württemberg, Filmuniversität Babelsberg and Hamburg Music Business Summer School. He curates conferences and facilitates events on innovation for the music ecosystem to foster knowledge transfer between visionaries from all intersections of the creative industries. His event series, the [Berlin Music Tech Meetups](#), has grown into a community of more than 1,800 music tech enthusiasts. Strobel has founded several startups in music tech and the creative industries. He holds a B.A. in Business Communications from the University of Applied Sciences, HTW Berlin.

Academic Policies

Grade Conversion

Your lecturer may use one of the following scales of numerical equivalents to letter grades:

A = 94-100 or 4.0
A- = 90-93 or 3.7
B+ = 87-89 or 3.3
B = 84-86 or 3.0
B- = 80-83 or 2.7
C+ = 77-79 or 2.3
C = 74-76 or 2.0
C- = 70-73 or 1.7
D+ = 67-69 or 1.3
D = 65-66 or 1.0
F = below 65 or 0

Attendance Policy

Studying at Global Academic Centers is an academically intensive and immersive experience, in which students from a wide range of backgrounds exchange ideas in discussion-based seminars. Learning in such an environment depends on the active participation of all students. And since classes typically meet once or twice a week, even a single absence can cause a student to miss a significant portion of a course. To ensure the integrity of this academic experience, class attendance at the centers is expected promptly when class begins. Attendance will be checked at each class meeting. If you have scheduled a remote course immediately preceding/following an in-person class, you may want to write to berlin.academics@nyu.edu to see if you can take your remote class at the Academic Center.

As soon as it becomes clear that you cannot attend a class, you must inform your professor and/or the Academics team (berlin.academics@nyu.edu) by e-mail immediately (i.e. before the start of your class). Absences are only excused if they are due to illness, Moses Center accommodations, religious observance or emergencies. Your professor or site staff may ask you to present a doctor's note or an exceptional permission from an NYU Staff member as proof. Emergencies or other exceptional circumstances that you wish to be treated confidentially must be presented to NYU Berlin's director or Wellness Counselor. Doctor's notes must be submitted in person or by e-mail to the Academics team, who will inform your professors.

Unexcused absences may be penalized with a two percent deduction from the student's final course grade for every week's worth of classes missed, and may negatively affect your class participation grade. Four unexcused absences in one course may lead to a Fail in that course. Being more than 15 minutes late counts as an unexcused absence. Furthermore, your professor is entitled to deduct points for frequently joining the class late.

Exams, tests and quizzes, deadlines, and oral presentations that are missed due to illness always require a doctor's note as documentation. It is the student's responsibility to produce this doctor's note and submit it to site staff; until this doctor's note is produced the missed assessment is graded with an F and no make-up assessment is scheduled. In content classes, an F in one assignment may lead to failure of the entire class.

Regardless of whether an absence is excused or not, it is the student's responsibility to catch up with the work that was missed.

Final exams

Final exams must be taken at their designated times. Should there be a conflict between your final exams, please bring this to the attention of the Academics team. Final exams may not be taken early, and students should not plan to leave the site before the end of the finals period.

Late Submission of Work

(1) Work submitted late receives a penalty of 2 points on the 100 point scale for each day it is late (including weekends and public holidays), unless an extension has been approved (with a doctor's note or by approval of NYU Berlin's administration), in which case the 2 points per day deductions start counting from the day the extended deadline has passed.

(2) Without an approved extension, written work submitted more than 5 days (including weekends and public holidays) following the submission date receives an F.

(3) Assignments due during finals week that are submitted more than 3 days late (including weekends and public holidays) without previously arranged extensions will not be accepted and will receive a zero. Any exceptions or extensions for work during finals week must be discussed with the Site Director, Dr. Gabriella Etmektsoglou.

(4) Students who are late for a written exam have no automatic right to take extra time or to write the exam on another day.

(5) Please remember that university computers do not keep your essays - you must save them elsewhere. Having lost parts of your essay on the university computer is no excuse for a late submission.

Academic Honesty/Plagiarism

As the University's policy on "Academic Integrity for Students at NYU" states: "At NYU, a commitment to excellence, fairness, honesty, and respect within and outside the classroom is essential to maintaining the integrity of our community. By accepting membership in this community, students take responsibility for demonstrating these values in their own conduct and for recognizing and supporting these values in others." Students at Global Academic Centers must follow the University and school

policies.

NYU takes plagiarism very seriously; penalties follow and may exceed those set out by your home school. Your lecturer may ask you to sign a declaration of authorship form and may check your assignments by using TurnItIn or another software designed to detect offences against academic integrity.

The presentation of another person's words, ideas, judgment, images, or data as though they were your own, whether intentionally or unintentionally, constitutes an act of plagiarism. It is also an offense to submit work for assignments from two different courses that is substantially the same (be it oral presentations or written work). If there is an overlap of the subject of your assignment with one that you produced for another course (either in the current or any previous semester), you MUST inform your professor. For guidelines on academic honesty, clarification of the definition of plagiarism, examples of procedures and sanctions, and resources to support proper citation, please see:

> [NYU Academic Integrity Policies and Guidelines](#)

> [NYU Library Guides](#)

Inclusivity Policies and Priorities

NYU's Office of Global Programs and NYU's global sites are committed to equity, diversity, and inclusion. In order to nurture a more inclusive global university, NYU affirms the value of sharing differing perspectives and encourages open dialogue through a variety of pedagogical approaches. Our goal is to make all students feel included and welcome in all aspects of academic life, including our syllabi, classrooms, and educational activities/spaces.

Attendance Rules on Religious Holidays

Members of any religious group may, without penalty, excuse themselves from classes when required in compliance with their religious obligations. Students who anticipate being absent due to religious observance should notify their lecturer AND NYU Berlin's Academics Office in writing via e-mail one week in advance. If examinations or assignment deadlines are scheduled on the day the student will be absent, the Academics Office will schedule a make-up examination or extend the deadline for assignments. Please note that an absence is only excused for the holiday but not for any days of travel that may come before and/or after the holiday. See also [University Calendar Policy on Religious Holidays](#)

Pronouns and Name Pronunciation (Albert and Zoom)

Students, staff, and faculty have the opportunity to add their pronouns, as well as the pronunciation of their names, into Albert. Students can have this information displayed to faculty, advisors, and administrators in Albert, Brightspace, the NYU Home internal directory, as well as other NYU systems. Students can also opt out of having their pronouns viewed by their instructors, in case they feel more comfortable sharing their pronouns outside of the classroom. For more information on how to change this information for your Albert account, please see the Pronouns and Name Pronunciation website.

Students, staff, and faculty are also encouraged, though not required, to list their pronouns, and update their names in the name display for Zoom. For more information on how to make this change, please see the Personalizing Zoom Display Names website.

Moses Accommodations Statement

Academic accommodations are available for students with documented and registered disabilities. Please contact the Moses Center for Student Accessibility (+1 212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance. Accommodations for this course are managed through NYU Berlin.

Bias Response

The New York University Bias Response Line provides a mechanism through which members of our community can share or report experiences and concerns of bias, discrimination, or harassing behavior that may occur within our community.

Experienced administrators in the Office of Equal Opportunity (OEO) receive and assess reports, and then help facilitate responses, which may include referral to another University school or unit, or investigation if warranted according to the University's existing Non-Discrimination and Anti-Harassment Policy.

The Bias Response Line is designed to enable the University to provide an open forum that helps to ensure that our community is equitable and inclusive.

To report an incident, you may do so in one of three ways:

- Online using the [Web Form (link)](#)

- Email: bias.response@nyu.edu

- US Phone Number: +1 212-998-2277

- Local Number in Berlin: +49 (0) 30 2902 91277

Please consider the environment before printing this syllabus. If printing is necessary, please select only the essential page range.