



DEMUSIS

Enhancing the digital competencies and entrepreneurship skills of academic musicians in Serbia for culturally more engaged society



UNIVERSITY
OF ARTS
IN BELGRADE



Co-funded by the
Erasmus+ Programme
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WP 1 Preparation and Analysis

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WP 1

- Lead partner: P1, active partners: P1–P9
- WP Chair: Ivana Perković
- foundation for further project activities.
- integrated data on existing study programmes in music in national and EU HEIs, and all existing capacities (infrastructure, facilities, audio laboratories, etc.) in the HEIs in Serbia.
- The main objectives:
 - internal or external assessment of national HEIs
 - development of new and modernized curricula in order to introduce digital and entrepreneurial skills for culturally more engaged society.

ASSESSMENT

- P1 – MusiQuE review
 - P2 and P3 – internal assessment
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- **1. Institutional mission, vision and context**
 - **2. Educational processes (how are programmes designed in terms of objectives, how is the institutions utilizing different form of teaching in the delivery of the programmes, how does the institution encourage critical reflection and self-reflection by the students, what role does research play throughout the programmes offered...)**

Assessment form (MusiQuE standards - original for P1/modified for P2 and P3)

- **3. Student profiles**
 - **3.1 Admission/Entrance qualifications**
 - **3.2 Student progression, achievement and employability**
- **4. Teaching staff**
 - **4.1 Staff qualifications and professional activity**
- **5. Facilities, resources and support**
 - **appropriate resources to support student learning and delivery of the programmes.**

Assessment form (MusiQuE standards - original for P1/modified for P2 and P3)

- **6. Internal Quality Culture**

- **7. Public interaction**

- Cultural, artistic and educational contexts, how does the institution engage within wider cultural, artistic and educational contexts, interaction with the artistic professions

Activity Title	Start date	End date	Place
P1 Self-evaluation report (for MusiQuE evaluation)	May 2019	25-09-2019	Belgrade
P3 Self-evaluation internal report (in Serbian)	May 2019	30-05-2019	Kragujevac
P 2 Self-evaluation internal report (in English)	May 2019	12-07-2019	Novi Sad

Comparative overview
of study programmes
at national music HEIs
Organization and
distribution of study
programmes at P1, P2
and P3

	FACULTY OF MUSIC, UNIVERSITY OF ARTS IN BELGRADE, P1	ACADEMY OF ARTS, UNIVERSITY OF NOVI SAD (P2)	FACULTY OF PHILOLOGY AND ARTS, UNIVERSITY OF KRAGUJEVAC (P3)
UNDERGRADUATE STUDY PROGRAMS	Composition Conducting Vocal studies Piano String instruments Wind instruments Polyinstrumental department (harp, organ, harpsichord, guitar, percussion) Musicology Ethnomusicology and Ethnochoreology Music theory Music pedagogy	Performing arts (piano, string instruments, wind instruments, guitar, harp, organ, percussion, solo singing) Music composition Music pedagogy Musicology Ethnomusicology	Performing arts (modules: Accordion, Piano, Vocal Studies, Violin, Viola, Cello, Double bass, Oboe, Flute, Clarinet, Bassoon, French horn) Music Theory and Education Music in Media
GRADUATE STUDY PROGRAMS	Composition Performing arts Sciences on music art	Performing arts (piano, string instruments, wind instruments, guitar, harp, organ, percussion, singing) Music composition Music pedagogy Musicology Ethnomusicology Music and media	Performing arts (modules: Accordion, Piano, Vocal studies, Violin, Viola, Cello, Double bass, Oboe, Flute, Clarinet, Bassoon, French horn, Chamber music) Music Theory and Education Music in Media
DOCTORAL STUDY PROGRAMS	Composition Performing arts Sciences on music	Ethnomusicology Music – performing arts Music composition Musicology	Doctoral academic studies Performing arts – Accordion

How did we integrate data?

Comparative report 1 Study visit to the New Bulgarian University	20-03-2019	23-03-2019	Sofia
Comparative report 2 Study visit to the Royal Conservatoire The Hague	18-04-2019	20-04-2019	The Hague
Comparative report 3 Study visit to Lithuanian Academy of Music and Theatre	02-04-2019	06-04-2019	Vilnius
Integrated comparative report (incl. results from WP 1.3)	May 2019	25-09-2019	Belgrade
MusiQuE institutional review, Faculty of Music, University of Arts in Belgrade	May 2019	Spring 2020 (estimated)	Belgrade

How did we integrate data?



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COMPARATIVE REPORT NO.2

An analysis of RCH study programmes and comparison with national higher music education institutions

(WP 1, activity 1.1.)

The Royal Conservatoire The Hague offers three Master's programmes with a wide range of graduation profiles and specializations: the Master of Music, the Master of Sonology and the Master in Opera (Dutch National Opera Academy). The Master of Music and the Master of Sonology embrace the following courses and specializations:

- Classical Music + instrument (including the specialisations Orchestra Master, Ensemble Academy and Ensemble Percussion)
- Chamber Music
- European Chamber Music Master (ECMAster)
- Jazz + instrument/vocals
- Early Music + instrument
- Vocal Studies
- Conducting
- Theory of Music
- Composition
- Music Education
- Music Education according to the Kodaly Concept
- ArtScience
- Art of Sound
- New Audiences and Innovative Practice
- Sonology
- Instruments and Interfaces
- Audio Communication & Sonology

How did we integrate data?

- There are several master programmes highly relevant to the DEMUSIS project:
 - ArtScience,
 - Art of Sound,
 - New Audiences and Innovative Practice,
 - Sonology,
 - Instruments and Interfaces and
 - Audio Communication and Sonology.

Audio Communication & Sonology Master

- The new Master's specialisation in Audio Communication & Sonology is a joint programme of the Technische Universität (TU) in Berlin and the Conservatoire's Sonology department.
- The programme combines a course in the theory of acoustics, audio technology, signal processing and musicology at the Audio Communication department of the TU Berlin with in-depth study of the artistic aspects of electroacoustic music and sound art in our Sonology department.

Curriculum Overview

Semester 1

Semester 2

Pflichtmodule / Compulsory Courses

AKT 1-1	Digitale Signalverarbeitung	6	AKT 5a	Elektroakustik und Raumakustik	6
AKT 1-2	Grundlagen Elektrotechnik	6	AKT 7a	Musikinformatik und Medienkunst I	6
AKT 1-3	Grundlagen Musikwissenschaft	6	AKT 8	Virtuelle Akustik	6
AKT 1-4	Einführung in die Kultur- und Geisteswissenschaften ⁶				
Aus den Modulen AKT 1-1 bis AKT 1-4 ist in Absprache mit den Studierenden eines auszuwählen, um aus dem jeweiligen Bachelorstudium resultierende Defizite im ingenieurwissenschaftlichen oder im kulturwissenschaftlichen Bereich auszugleichen.					
AKT 2	Empirisch-wissenschaftliches Arbeiten	6			
AKT 4	Grundlagen Akustik	9			
Summe		21	Summe		18

Wahlpflichtmodule / Electives

Module aus dem Wahlpflichtbereich „Audiokommunikation und -technologie“ / Electives from the Module Catalogue „Audio Communication and Technology“

Summe		9	Summe		12
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Lithuanian Academy of Music and Theatre

- Curriculum overview for
Electronic Music,
Recording and
Production and Music
Industry and
Management Bachelor
at LMTA

SPECIALIZATION: MUSIC INDUSTRY AND MANAGEMENT

Music and audio contexts
Music and Technology Literacy
Performing Arts Organizations and Management
Performing Arts Producing in Media
Music performer and event management
Musical tours and collective tours organization
Music Producing and Publishing
Stage Production Management
Music Event Management Practice
Professional Practice
Management theories
Leadership and Entrepreneurship
Personnel Management
Art Management Department
Marketing
Fundraising and Grant Application Development
Taxes and Accounting
Creative Thinking
Organizational Psychology
Arts Marketing and Audience Development Strategies
Strategic Management
Management of Popular Culture
Art of Negotiation
Public Speaking
Introduction to Cultural Policy
Social Sciences Research Methods
Business Ethics and Social Responsibility
Creative Business: Establishment and Development

New Bulgarian University

- Formal organization of Music studies on the BA (four years) and MA (two years) level is conducted so that they are incorporated in the wider field of Arts. At the BA level, field of music is divided in two main modules:
- 1) Sound Engineer and Music Management and
- 2) Music and Dance Performance. There are four specializations, two of them relevant for the DEMUSIS project
- Module 1: Sound Production and Music Management
Module 2: Music and Dance

Specialization: Music Management

Specialty: Music and dance

Qualification: Music Manager

Specialization: Directing and electronic / computer music

Specialty: Composition and Electronic / Computer Music

Qualification: sound engineer, sound designer

Music management	Tone directing and electronic / computer music
8th semester	8th semester
Classroom Courses (Credit) - Specialized	
MUSB733 Audio design Software - Part II	MUSB733 Audio design Software - Part II
MUSB800 Music Theory (Harmony, Polyphony, Analysis) - Part IV	MUSB800 Music Theory (Harmony, Polyphony, Analysis) - Part IV
Classroom (credit) courses - individual	
MUSB806 Thematic music project	MUSB806 Thematic music project
MUSB892 Sound Editing	MUSB892 Sound Editing
Classroom Courses (Credit)	
MUSB416 Modeling and Digitizing the Creative Process	MUSB416 Modeling and Digitizing the Creative Process
MUSB691 Marketing Strategies and Practices in the Music Arts - Part II	MUSB682 Sound Engineering Part II.
MUSB702 Specificity of European projects	MUSB881 Computer Systems in Sound Recording
MUSB789 Production and Management in Electronic Media	MUSB883 Studio Engineering and Technologies Part II
MUSB890 Music in the Media and Digital Industries	MUSB890 Music in the Media and Digital Industries
Classes (non-credit)	
MUSB884 Studio	MUSB547 Computer Programming and Musicking on Synthesizer
MUSB957 Project work - part IV	MUSB884 Studio
Training courses	
MUCB071 Seminars: Scientific seminars - IV	MUCB071 Seminars: Scientific seminars - IV
MUCB072 Internship - Part II	MUCB072 Internship - Part II
MUCB073 Project - Music and Theater Workshop - Part IV	MUCB073 Project - Music and Theater Workshop - Part IV
MUCB075 Project: Concerts, competitions and participation in master classes - part IV	MUCB075 Project: Concerts, competitions and participation in master classes - part IV
MUCB096 Project: Studio - Part IV	MUCB096 Project: Studio - Part IV

Learning outcomes and competences: stakeholders' view

Radio Television of Serbia, national broadcasting service

- Journalist/Editor/Author/Presenter: curiosity, perseverance, good enunciation, no speech impediments, knowledge of foreign languages is preferable, understanding of journalistic genres and forms, writing reviews, appearance before camera or microphone; knowledge on and following of the music scene, as well as problems/topics/laws/education in the field of music. According to the music education profile, good results at this position were achieved by those with good writing skills and analytically oriented, such as musicologists, ethnomusicologists, music theorists with general secondary school education.
- Editor/Concert recordings: excellent knowledge on music literature, ability to distinguish and follow “conductor’s line”. At this position, so far the best results were achieved by music performers, conductors and music theorists.
- Editor/Assistant in documentary or similar shows: selection of background music as a constitutive part of the narrative, both on radio and TV shows. Knowledge and skills: knowledge of music literature of all genres, and understanding of relation between music and picture (for TV shows). According to the music education profile, good results at this position were achieved by music performers and music theorists, and musicians in general.
- Radio editor/Playlist editor: knowledge on popular, rock, traditional music scene and literature, the ability to link the numbers in the play list according to their tonality, tempo, production level, lyrics. The knowledge on how to insert numbers into Jutel program (from CD, USB, email, etc.) and sound editing (using sound forge tool within Jutel program). According to the music education profile, good results at this position were achieved by music theorists, particularly those with personal insight in one of the music genres or the music scene as performers.
- Editor of spectacles/live shows/mixed programs: Competency in one particular component of production work: guest selection and invitation, agreement on live performance, topic conceptualization or collaboration on screenwriting, knowledge on popular (pop-rock) and traditional/folk music scene. According to the music education profile, good results at this position were achieved by music performers and music theorists, and musicians in general.

Learning outcomes and competences: stakeholders' view

Radio Television of Serbia, national broadcasting service

- Copyright: knowledge and understanding of rights and obligations of music editors, how to fill out specific copyright use forms (unless the music is selected from the Jutel database directly registered in SOKOJ – Serbian Music Authors' Organization).
- Choir singer in Music Production: choral singing skills (usually acquired in choral singing courses at the music higher education institutions)
- Orchestral musician in Music Production: orchestral performance skills (usually acquired by playing in a symphony orchestra or jazz ensemble at the music higher education institutions)
- Conductor in Music Production: degree in conducting.
- Folk/Traditional music performer/Editor: special insight, deep understanding and knowledge on urban traditional and folk music, both vocal and instrumental (traditional music, stylized folk music, old urban songs and romances, new tradition urban songs, contemporary world/"ethno" music, etc).
- Music producer/Sound designer: ability and knowledge on creating a particular soundscape (or style, epoch) of concerts and music numbers to be recorded and archived.
- Piano tuner
- Composer of intro music, jingles, background music: composing applied music for specific radio and television formats
- Sound recorded/ Sound archive worker/Non-linear editor: knowledge on digital tools for creating, broadcasting and archiving radio/tv programs, offline editing, digitization of archives

Learning outcomes and competences: stakeholders' view Gaming companies

- Working in notation programs
 - Finale, Sibelius, Muscore and more.
- Working at DAW (Digital Art Workstation)
 - Cubase, Ableton, Pro Tools, Reaper and more.
- Working in Adaptive Audio Engines
 - FMOD, WWISE
- Game Engine Basics (with an emphasis on sound)
 - Unity, Unreal et al.
- Basics of scripting in the appropriate programming language
- The basics of sound theory (physics, etc.)
- Sound Libraries
- Sound recording for sound effects
- Processing existing sounds
- A creative approach to creating sound effects

Learning outcomes and competences: stakeholders' view Gaming companies

- Working with orchestra imitation libraries
 - EWQL, Symphobia, VSL
- Music theory
- Orchestration
- Mix and mastering
- Combine and align adequate sounds and music with the image, according to the atmosphere, context, visual content, etc.
- Understanding the role of sound in video games, analytical approach to sound in video games and video games in general.
- Sound recording: musicians should know how to record themselves, and work out the basics of mix, mastering, microphone settings.
- Video recording: Artists can record themselves and post to Instagram, YouTube and more.

Learning outcomes and competences: stakeholders' view Ministry of Culture

- how to assess opportunities,
- how to create a value (economic, social, cultural),
- how teams dealing with music creation/performance/research/ teaching develop and function;
- how to organize educational event
- how to investigate the value and meaning of music in the particular community
- how to include contemporary technology in exploring music in social changes
- how to develop initial idea into a business opportunity, to effectively combine in-depth knowledge in music with understanding of digital technologies and entrepreneurship in a contemporary society;
- what is the societal impact of their activities
- what is the cultural impact of their activities
- how to evaluate and improve the quality of their creative project in music creation, performance and/or research.
- skills to analyze new opportunities, to identify and develop new opportunities withing each field of experience of a musician.

Modernization of current study programmes: Faculty of Music, University of Arts in Belgrade (P1)

- Modernization of 97 (all study levels) existing courses
- Introduction of 5 new elective courses for undergraduate students:
 - Introduction to project planning and music entrepreneurship and
 - Basics of digital literacy for musicians
 - Introduction to digital notation for students of all study programs
 - Basics of working with Digital Audio Workstation – DAW
 - Contemporary notation and advanced digital notography,

Modernization of current study programmes: Faculty of Music, University of Arts in Belgrade (P1)

Modernized courses:

Ethnochoreology, World dances, Introduction to Ethnomusicology, Basics of research methodology, Ethnomusicology teaching methods, Traditional singing methods, Ethnomusicology: method, theory, approach, History of music, Methodology of research/master thesis, National history of music – Music in Serbia at the turn of the 19th and beginning of 20th century, History of music – Baroque, History of Music – Ancient music, Introduction to Musicology, Writing the research and theory paper, History of music seminar paper, National history of music seminar paper, Applied aesthetics and sciences on arts, Introduction to the applied aesthetics, sciences and theories on arts, Music forms analysis, Music styles analysis, Vocal music analysis, History of Music Theory, Counterpoint, Music forms, Introduction to music theory and analysis, Music form analysis seminar paper, Solfeggio teaching methods, Principles of solfeggio teaching methods, Practical solfeggio teaching methods, Methods of music teaching in elementary schools, Practical methods of general music education, Children music ensembles, Didactic music games for elementary school, Musical: Guidelines in Teaching and Performance, Improvisation – voice and piano, Concert practice, Arranging, Harmony, Compositional aspects of pop music, Practicum in stylistic composing and improvisation, Vocal counterpoint, Instrumental counterpoint, Methods in harmony, music forms and counterpoint teaching, Music Analysis, Music Forms, Essays in impressionism harmony.

Modernization of current study programmes: Faculty of Music, University of Arts in Belgrade(P1) Modernized courses

Ethnochoreology, World dances, Introduction to Ethnomusicology, Basics of research methodology, Ethnomusicology teaching methods, Traditional singing methods, Ethnomusicology: method, theory, approach, History of music, Methodology of research/master thesis, National history of music – Music in Serbia at the turn of the 19th and beginning of 20th century, History of music – Baroque, History of Music – Ancient music, Introduction to Musicology, Writing the research and theory paper, History of music seminar paper, National history of music seminar paper, Applied aesthetics and sciences on arts, Introduction to the applied aesthetics, sciences and theories on arts, Music forms analysis, Music styles analysis, Vocal music analysis, History of Music Theory, Counterpoint, Music forms, Introduction to music theory and analysis, Music form analysis seminar paper, Solfeggio teaching methods, Principles of solfeggio teaching methods, Practical solfeggio teaching methods, Methods of music teaching in elementary schools, Practical methods of general music education, Children music ensembles, Didactic music games for elementary school, Musical: Guidelines in Teaching and Performance, Improvisation – voice and piano, Concert practice, Arranging, Harmony, Compositional aspects of pop music, Practicum in stylistic composing and improvisation, Vocal counterpoint, Instrumental counterpoint, Methods in harmony, music forms and counterpoint teaching, Music Analysis, Music Forms, Essays in impressionism harmony.

Modernization of current study programmes: Faculty of Music, University of Arts in Belgrade(P1)

New courses

Study program: Bachelor 1st cycle studies – Composition, Music Performance, Music Research Oriented Study Program

Course: **BASICS OF PROJECT PLANNING AND MUSIC ENTREPRENEURSHIP**

Teachers: Marija Jović, Ivana Perković, Dragana V. Jovanović

Course status: elective, one semester; Number of ECTS: 2; Prerequisites: None

Course objective:

Obtaining knowledge on basics of music entrepreneurship in fields related to the realization of professional career and project work. Understanding the importance of planning of professional career in the field of music and obtaining knowledge on the concept of project sustainability. Mastering basic skills necessary for entrepreneurial approach to profession.

Course outcome:

After successful completion of the module students will be able to explain the significance of music entrepreneurship and projects for their future professional careers. Students will be able to concisely present their opinion on entrepreneurial approach related to other ways of professional engagement in society, to compose professional biography, elementary business plan and project proposal.

Course content:

What is music entrepreneurship? Primary means of representation of musicians in written and oral form (biography, CV, motivational letter, recommendations); Basics promotional strategies for musicians; Basic strategies for connecting with audience and other target groups; Basics of business plan and SWOT analysis; Music, innovation and community – case studies; Project funding and project planning; Project application and realization – case studies; Dissemination and sustainability

Modernization of current study programmes: Faculty of Music, University of Arts in Belgrade(P1)

New courses

Study program: Bachelor 1st cycle studies – Composition

Course: **CONTEMPORARY AND DIGITAL NOTOGRAPHY**

Teachers: Tatjana Milošević Mijanović, Svetlana Savić, Branka Popović

Course status: elective, one semester; Number of ECTS: 2; Prerequisites: Knowledge on work in Sibelius and/or Finale notation program

Course objective:

Introduction to the contemporary music notation and advanced level of using digital notation programs (Finale and/or Sibelius)

Course outcome:

Student is capable of reading contemporary music scores and understanding extended playing techniques; student is able to produce a digital writing of the said music score.

Course content:

Theory:

1. Understanding and analysis of contemporary music scores. Explanation of extended playing techniques on various instruments. Introduction to the symbols and legends characteristic for extended playing techniques.
2. Work in Finale/Sibelius programs for digital music notation. Getting to know program tools, writing micro intervals, designing contemporary notation symbols, creating graphs...

Practical work:

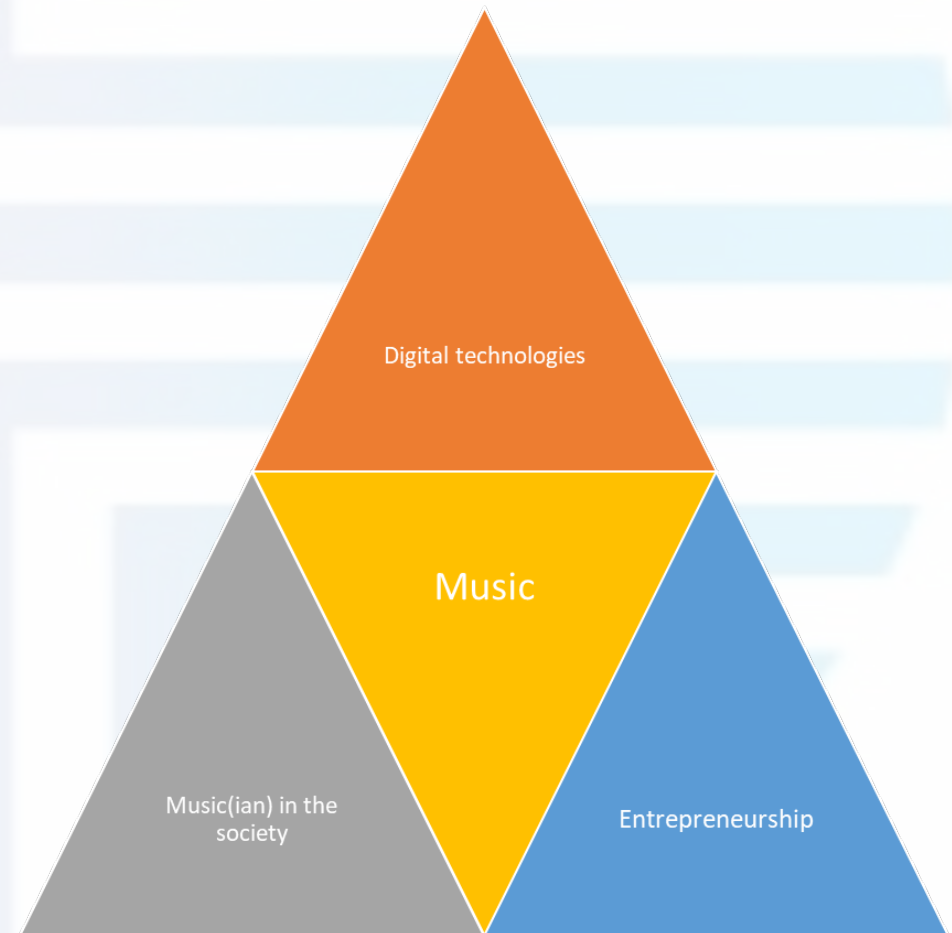
Individual student digital notation assignments.

Modernization of current study programmes: Faculty of Music, University of Arts in Belgrade(P1)

New master study programme

Applied research and innovation in music

- Interdepartmental initiative
- 60 ECTS
- opened to all students with 240 ECTS in HMEI
- Main thematic pillars:
 - Music,
 - Digital technologies,
 - Entrepreneurship,
 - Music(ian) in the society



Modernization of current study programmes:
Faculty of Music, University of Arts in Belgrade(P1)

New master study programme

Applied research and innovation in music

Subject	Semester	ESPB
Methods for working with digital audio	1	5
Digital methods for research of music and music related data	2	5
Marketing approach to music	1	4
Music industry and contemporary artistic practice	2	4
Transmedial storytelling for musicians	1	4
Creative process and participatory practice in music	2	4
Electives (2 blocks)	1	6 + 6
Practical placement	2	6
Master project	2	8

New master study programme

Applied research and innovation in music

Digital methods for research of music and music related data

- basic knowledge of innovative techniques and methods of music research with digital technologies.
- methods, tools or infrastructures relevant to topics in the fields of data collection, presentation, standardization and analysis of music through new technological media
- methods and techniques for digitalization of musical heritage (notated or in audio format): basics of OMR (optical music recognition) software, MusicXML which is incorporated into the MEI (music encoding initiative), a system for encoding music documents into structures that can be machine readable and then analyzed and interpreted in a variety of ways.
- basic considerations of digital (critical) music editions, both important for research and for performing music.
- Importance of machine learning for practical, scientific or pedagogical music professionals, taking into account the commercial applications of machine learning

New master study programme

Applied research and innovation in music

Transmedia storytelling for musicians

- Basic understanding and practical application of the innovative concept of "transmedia storytelling" to the extent that it is relevant to musicians.
- How a piece of music, production, program, composer or performer, style, musical technique, or any particular moment in musical work can be presented using the "telling a story" technique, through various media.
- Media channels: such as verbal, visual, television, radio, film, but also websites, multimedia, blogs, social networks, including video games, mobile applications, streaming services, commercials, etc.
- In each of them the "story" is somewhat different and depends on the nature of the medium, so the overall picture is acquired only from a transmedial perspective.
- The aim is to present, share and promote the result of artistic work and reflection from multiple media perspectives and using different media.