Curriculum Handbook Bachelor of Music – Sonology

Academic Year 2022/23

Royal Conservatoire The Hague

The information contained in this Curriculum Handbook is, beyond errors and omissions, correct at the time of publication, but may be subject to change during the academic year. Therefore, always make sure you are referring to the latest version of this document which can be found at our website.
For questions about courses, you can get in touch with the contact person mentioned in the course description.

Due to the COVID-19 circumstances, our education programme and Education and Examination Regulations might differ from how these are described in our regulations and Curriculum Handbooks. In the event of any regulatory changes regarding assessment, a 'Corona addendum' will be published.

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INTRODUCTION

“Space is music’s medium of transformation.” Gottfried Michael Koenig, Bilthoven Course 1961/62.

Sonology is the field of study involving experimentation with electroacoustic music, computer music and sound art. The pioneers of the age of electronic music include figures such as Edgard Varèse Pierre Schaeffer, Karlheinz Stockhausen and Iannis Xenakis: composers with an inquiring mind who dared to move off the beaten track. Instead of composing with sounds, as is generally the case in instrumental music, in sonology the sound itself is composed in such a way that it gives expression to musical form. This can take place on the basis of the physical principles of sound, on the basis of perception or on the basis of purely compositional ideas.

The explosive pace of advances in the field of (computer) technology and electronics is also creating new possibilities for music and composition. Sonologists investigate these possibilities and add new elements to the musical domain. We are not bound by conventions or stylistic dogmas, but stretch the limits of the genre. It is an important role that we play and one that is integral to the world of new music.

The Institute of Sonology is one of the conservatoire’s Creative Departments, with an extensive network of partners that includes the Groupe de Recherches Musicales (GRM) in Paris, the Netherlands Music Institute (NMI), Studio LOOS in The Hague, Willem Twee Studios in Den Bosch, the Technische Universität Berlin and the Game of Life Foundation in The Hague.

The curriculum of the four-year bachelor’s programme in Sonology, which is taught entirely in English, covers every technical aspect of electroacoustic music and the artistic context in which those techniques are applied. The subjects include studio composition, writing and using computer applications, research into sound, the relationship between sound and space, digital signal processing, algorithmic composition, the theory of electronic music, live electronic music, improvisation and sound art. The Institute of Sonology has six studios fitted with state-of-the-art equipment. One studio has a Wave Field Synthesis system for spatial sound projection. The conservatoire’s concert hall frequently host concerts by Sonology students, faculty members, guest artists and the Sonology Electroacoustic Ensemble.

In addition to group lessons, you will devote steadily more time to your own projects as the course progresses. The projects can focus on technical and/or artistic aspects and you will have regular opportunities to present the results to an audience in the Sonology Discussion Concerts. A bachelor’s degree in Sonology opens the way to a career as an independent electronic musician or in the field of multimedia, sound design, live electronic music, sound engineering and education.

In recent years, guest lectures, master classes and workshops have been given by Trevor Wishart, Daniel Teruggi, Nic Collins, Alvin Lucier, Stefan Weinzierl, Gottfried Michael Koenig, Konrad Boehmer, Arne Deforce, Francisco Lopez, Kaija Saariaho, Larry Polansky, Barry Truax, Matthew Ostrowski, Folkmar Hein, Sarah Nicolls, Richard Cavell, Douglas Kahn, Peter Evans, Evan Parker, Richard Scott, Hillel Schwartz, Cathy van Eck, Sara Pinheiro, Stefan Weinzierl, Horacio Vaggione, Peter Ablinger, among many others.

In this document you will find the programme objectives, details about the sonology bachelor’s curriculum and course descriptions including learning goals (called ‘objectives’) and assessment criteria. We recommend you to read this document, the study guide and the Education and Examination Regulations (EER) carefully.

PROGRAMME OBJECTIVES BACHELOR SONOLOGY

Below you will find a set of requirements which we call programme objectives. These are the minimum requirements that you need to meet in order to obtain a Bachelor of Music degree from the Royal Conservatoire. Our programme objectives are based on the AEC Learning Outcomes (2017)[1], an international qualification framework developed by the European Association of Conservatoires (AEC), which is based on a broad consultation with institutions all over Europe and experts from the music profession. The objectives have been adapted where necessary to fit the study programme of our BMus in Sonology.

The bachelor's programme objectives are divided in three categories: A) practical outcomes, B) theoretical outcomes and C) generic outcomes – and are numbered for ease of reference. In the course descriptions, the field 'programme objectives' refers to these codes, e.g. 1.A.1, 1.B.4, 1.C.10. This means that the course contributes to obtaining the skills and knowledge described in those programme objectives. There may be several courses contributing to the same objectives.

At the end of the Bachelor of Music in Sonology programme, you:

A. Practical (skills-based) outcomes

1.A.1. Demonstrate ability to realise, recreate, create, manipulate and/or produce music as appropriate within your discipline or genre for practical purposes and settings.
1.A.2. Demonstrate effective and professionally appropriate study, practice and rehearsal techniques.
1.A.3. Demonstrate evidence of craft skills in relation to a variety of performance practices.
1.A.5. Engage musically in varied ensemble and other collaborative contexts, including those which cross boundaries with other disciplines.
1.A.6. Demonstrate improvisational fluency, questioning, shaping and/or creating music in ways which go beyond the notated score.
1.A.7. Identify key questions about and undertake self-reflective enquiry into your own artistic practice.
1.A.8. Explore, evaluate, apply and challenge existing scholarship, research, composing and performing practices.
1.A.9. Utilise appropriate oral, digital and practical formats to disseminate information and ideas about electronic music and sound art.
1.A.10. Communicate information, ideas, problems and solutions to specialist and non-specialist audiences through a range of media and presentation formats.
1.A.11. Use appropriate digital technology to learn, create, record, produce and disseminate musical and research materials.
1.A.12. Evidence skills in the use of new media for promotion and dissemination.
1.A.13. Demonstrate a range of communication, presentation and self-management skills associated with public performance.
1.A.14. Recognise and respond appropriately to a range of performing contexts, spaces and environments.
1.A.15. Recognise, reflect upon and develop your own personal learning styles, skills and strategies.
1.A.16. Lead and/or support others in their creative processes as well as in their learning, thus creating a constructive and supportive learning environment.
1.A.17. Engage with a range of audience and/or participant groups across a range of professional working contexts.
1.A.19. Develop artistic concepts and projects and the capacity to present these professionally to potential employers and audiences.
1.A.20.KC. Ability to use sound reinforcement systems to project electronic music and sound art in a range of performance situations.

B. Theoretical (knowledge-based) outcomes

1.B.1. Demonstrate knowledge of practices, languages, forms, materials, technologies and techniques relevant to the discipline, and their associated texts, resources and concepts.
1.B.2. Exhibit sound knowledge of the theoretical and historical contexts in which music and art is

[1] https://www.aec-music.eu/userfiles/File/customfiles/aec-learning-outcomes-2017-english_20171218113003.pdf

practiced and presented, including a range of styles and their associated performing traditions.
1.B.3. Exhibit comprehensive knowledge of relevant representative repertoire within your area of study, demonstrating the ability to create and provide coherent experiences and interpretations[2].
1.B.4. Draw upon knowledge and experience to explore and engage with new and challenging repertoire and styles.
1.B.6. Recognise, internalise and respond to the fundamental processes which underlie improvisation and create musical materials aurally and/or in written form.
1.B.7. Evidence understanding of the means by which musicians can develop, research and evaluate ideas, concepts and processes through creative, critical and reflective thinking and practice.
1.B.8. Demonstrate ability to gather and utilise relevant information found within libraries, internet repositories, museums, galleries and other relevant sources.
1.B.9. Identify strategies to interpret, communicate and present ideas to a range of audiences.
1.B.10. Display knowledge of a range of ways that technology can be used in the creation, dissemination and performance of electronic music and sound art.
1.B.12. Identify a range of professional working environments and contexts, reflecting on the role of the artist in contemporary society.
1.B.13. Recognise the skill demands of local, national and international electronic music and sound art communities.
1.B.15. Exhibit familiarity with concepts and practices of pedagogy, in particular strategies to motivate and facilitate creativity and learning.

C. Generic outcomes
1.C.1. Demonstrate systematic analytical and processing skills and the ability to pursue these independently and with tenacity.
1.C.2. Demonstrate strong self-motivation and self-management skills, and the ability to undertake autonomous self-study in preparation for life-long learning in support of a sustainable career.
1.C.3. Demonstrate a positive and pragmatic approach to problem solving.
1.C.5. Evidence flexibility, the ability to rapidly synthesise knowledge in real time, and suggest alternative perspectives.
1.C.6. Recognise the relevance of and be readily able to adapt previously learned skills to new contexts.
1.C.7. Develop, research and evaluate ideas, concepts and processes through creative, critical and reflective thinking and practice.
1.C.8. Respond creatively and appropriately to ideas and impetus from others while exhibiting the ability to digest and respond to verbal and/or written feedback.
1.C.9. Exhibit ability to utilise and apply a range of technology in relation to your practice, including the promotion of your professional profile.
1.C.10. Project a confident and coherent persona appropriate to context and communicate information effectively.
1.C.11. Making use of your imagination, intuition and emotional understanding, think and work creatively, flexibly and adaptively.
1.C.13. Engage with individuals and groups, demonstrating sensitivity to diverse views and perspectives, and evidencing skills in teamwork, negotiation, leadership, project development and organisation as required.
1.C.14. Recognise and respond to the needs of others in a range of contexts.
1.C.16. Exhibit a long-term perspective on individual artistic development, demonstrating an inquiring attitude, and regularly evaluating and developing artistic and personal skills and competences in relation to personal goals.

[2] NB in this context the word 'repertoire' should be understood to include an original work or production created by an individual composer, performer or ensemble.

CURRICULUM OVERVIEW

code	**Sonology**	**Year 1**	**Year 2**	**Year 3**	**Year 4**
	Bachelor of Music in Sonology 2022-2023				
KC-AL-	**Artistic Development**				
SO-COZ	Specialisation: Composition/Performance/Research	7	13	14	29
SO-PI	Preparation for Individual Projects	2			
SO-EWS1,2	Exchange Workshops	4			
MZC	Composing in the Analogue Studio	4			
KI	Sound Installations		4		
AT	Aural Tectonics			4	
SO-N&S	Scores and Archives in Electroacoustic Composition				2
K&R	Sound and Space				8
KC-SO-SPW	Spatial Composition with WFS			4	
	Subtotal	**17**	**17**	**22**	**39**
KC-SO-	**Technological Skills and Knowledge**				
SO-MP	Introduction to Electronics	3			
ISD	Digital Studio Introduction	3			
RMM	Real-time Processes with Max/MSP	7			
KC-SO-VCT	Voltage Control Techniques	4			
S&ST	Signals and Systems 1 & 2	5	5		
P&M	Programming and Music 1 & 2	8	7		
MCW	Musical Controllers Workshop		7		
PHM1	Analysis / Re-synthesis			4	
PHM2	Physical Models				4
	Subtotal	**30**	**19**	**4**	**4**
KC-AS-	**Musicianship Skills**				
SO-AML1, 2	Music Theory 1 & 2	4	4		
SO-HCMP	History of Contemporary Music Composition		2		
LEM	Live Electronic Music			6	
SO-AML4	Music Analysis and Mixed Media Composition			4	2
	Subtotal	**4**	**6**	**10**	**2**
KC-AS-	**Academic Skills**				
SO-COLQ	Colloquium Participation	2	2	2	2
SO-NAMT	New Arts and Music Theories	3			
SO-WS	Writing Skills			4	
SO-MC	Music Cognition			2	
SO-CP	Colloquium Presentation				3
SO-PFP	Preparation Final Presentation				4
	Subtotal	**5**	**2**	**8**	**9**
KC-	**Professional Preparation**				
AL-FYF	Start-Up!	2			
AL-PF3	Tutoring	2	2	2	
SO-GLT	Sound Engineering in Electronic Music 1 & 2		4	4	
ED-ESCA	Educational Skills for Creative Artists 1, 2 & 3		4	2	
SO-WP	Work Placement			2	
	Subtotal	**4**	**10**	**10**	**0**
	Minor/Electives				
	Minor or Electives		6	6	6
	Subtotal		**6**	**6**	**6**
	Total per year	**60**	**60**	**60**	**60**
	Total				**240**

This overview is subject to change as the Royal Conservatoire monitors its curricula on an annual basis.

COURSE DESCRIPTIONS

ARTISTIC DEVELOPMENT

SPECIALISATION: COMPOSITION/PERFORMANCE/RESEARCH

Course title:	**Specialisation Composition/Performance/Research**
Osiris course code:	KC-SO-COZ
Course content:	In addition to the group lessons, you work on an individual project, under the guidance of a mentor with whom you have regular meetings. The project can consist of personal compositions, sound experiments, sound design, sound installations, personally built electronic musical instruments, (partially) self-written computer programs or a report of a study. In the fourth year the project is presented to and discussed with the other students during the Sonology Colloquium. During the fourth year, you also write a thesis, the subject of which may be connected with the project but need not be. The results of the project and the thesis are presented and evaluated during the end-of-year and final presentations.
Objectives:	At the end of this course, you: ▪ are able to work independently on your own creative and research projects; ▪ have developed a precise sense of self-assessment and criticism relative to these projects; ▪ are able to incorporate these reflections into the further development of your work; ▪ are able to describe the artistic context and the content of the individual project in a written thesis.
Programme objectives:	1.A.1, 1.A.2, 1.A.3, 1.A.9, 1.A.11, 1.A.12, 1.A.13, 1.A.15, 1.B.1, 1.B.10, 1.C.1, 1.C.2, 1.C.3, 1.C.7, 1.C.8, 1.C.9, 1.C.10, 1.C.11, 1.C.16
Type of course:	Compulsory
Level:	Bachelor I–IV
Duration:	approximately 1 meeting of 1 hour with a mentor per month
Prior qualifications/ prerequisites:	The student should finish each year of this course before being allowed to enter the next.
Teachers:	Richard Barrett, Justin Bennett, Bjarni Gunnarsson, Ji Youn Kang, Johan van Kreij, Peter Pabon, Gabriel Paiuk, Kees Tazelaar
Credits:	7 – 13 – 14 – 29 ECTS per academic year
Literature:	–
Work form:	Individual meetings
Assessment:	Bachelor I, II, III: Presentation during end-of-year exam Assessment criteria: • creativity • originality • discipline Bachelor IV: Final Concert Presentation (30 minutes)

	The music and a written thesis, in which the context and development of the project are documented, are discussed with a committee during a 45-minute interview. For assessment criteria, see the *Bachelor Sonology Assessment Criteria* at the end of this curriculum handbook.
Grading system:	Numeric
Language:	English
Schedule, time, venue:	Individual appointments
Information:	Kees Tazelaar (k.tazelaar@koncon.nl)

PREPARATION FOR INDIVIDUAL PROJECTS

Course title:	**Preparation for Individual Projects**
Osiris course code:	KC-AL-SO-PI
Course content:	At the end of each year, you are expected to present the results of your individual project (see Specialisation Composition/Performance/Research). This course has been developed to fully prepare you for what is expected (e.g. content, format), and to make sure that your individual project is integrated in your weekly work schedule.
Objectives:	At the end of this course, you: ▪ have a clear idea what is expected regarding the individual Specialisation Composition/Performance/Research; ▪ are prepared to present an individual project to the committee at the 1–2 bachelor's exam; ▪ are able to discuss the progress of your individual project with your teachers and fellow students.
Programme objectives:	1.A.9, 1.A.11, 1.A.13, 1.B.10, 1.C.1, 1.C.2, 1.C.9, 1.C.10, 1.C.16
Type of course:	Compulsory
Level:	Bachelor I
Duration:	10 two-hour sessions
Prior qualifications/ prerequisites:	-
Teachers:	Ji Youn Kang and Sonology Research Associates
Credits:	2 ECTS
Literature:	
Work form:	Group lessons
Assessment:	Short presentation at the end of semester 1 during which your plans for your individual project in semester 2 are discussed.

	Assessment criteria: • artistic and/or research-related quality of the work presented • logical and informative presentation • progress and potential of the individual project
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Ji Youn Kang (j.kang@koncon.nl)

EXCHANGE WORKSHOPS 1+2

Course title:	**Exchange Workshops 1+2**
Osiris course code:	KC-AL-SO-EWS1,2
Course content:	The creative departments organise annual exchange workshops, covering different topics related to composition, sonology, media arts and artscience. The workshops are led by guest teachers and take place twice per year, in the two weeks after the autumn holiday and the two weeks after the spring holiday.
Objectives:	At the end of this course, the student: ▪ has gained insight into the artistic ideas and working methods of the creative departments; ▪ has developed skills and knowledge about the working field.
Programme objectives:	1.A.11, 1.B.12, 1.B.13, 1.C.7, 1.C.11
Type of course:	Compulsory for bachelor's I, elective for bachelor's II to IV and master's students
Level:	Bachelor and Master
Duration:	5 or 10 days of 5 hours (depending on the type of workshop)
Prior qualifications/ prerequisites:	–
Teachers:	Guest teachers
Credits:	Exchange Workshop 1 = 2 ECTS Exchange Workshop 2 = 2 ECTS
Literature:	–
Work form:	Workshop
Assessment:	Compulsory attendance: 80%. Depending on workshop: possibility of an assignment.
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See the workshop description document
Information:	Erika Bordon – Coordinator Sonology (e.bordon@koncon.nl)

COMPOSING IN THE ANALOGUE STUDIO

Course title:	**Composing in the Analogue Studio**
Osiris course code:	KC-AL-SO-MZC
Course content:	Students gain the basic knowledge they need to feel comfortable and work independently in the environment of an analogue studio. They learn how to operate the mixing console and patch bay, how sound is sent to the eight-speaker system and how to record on the computer using Pro Tools. They then start working on an assignment focusing on analogue sound transformation. Attention is given to how both microphone recordings and electronically generated sounds can be transformed through several techniques such as: transposition, looping, layering, mixing, filtering, reverberation, echo, amplitude modulation, ring modulation and combinations of these. The results of the experiments are combined in a small composition. In addition, we will discuss the creative possibilities and performability of the analogue studio and listen to music examples associated with different experimental studio practices.
Objectives:	At the end of this course, you: ▪ are able to work independently in an analogue studio for electronic music production; ▪ are able to apply analogue sound transformations both to electronically generated sounds and microphone recordings; ▪ are able to document and communicate procedures in an analogue studio for electronic music production.
Programme objectives:	1.A.1, 1.A.3, 1.A.9, 1.A.11, 1.B.1, 1.B.10
Type of course:	Compulsory
Level:	Bachelor I
Duration:	1 semester, 120 minutes per week (group lessons) plus 180 minutes per week (individual studio sessions), 15 weeks
Prior qualifications/ prerequisites:	–
Teachers:	Yannis Patoukas
Credits:	4 ECTS
Literature:	Studio manual, patching examples provided during the lessons
Work form:	Group lesson
Assessment:	Students are assessed on the basis of their active contribution to the group sessions and one large-scale assignment (see course content). Assessment criteria: • ability to produce independent creative work in the studio • ability to use and document the sound-transformations described in the course in a clear way • imaginative fulfilment of the compositional assignment
Grading system:	numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Yannis Patoukas (y.patoukas@koncon.nl)

SOUND INSTALLATIONS

Course title:	**Sound Installations**
Osiris course code:	KC-AL-SO-KI
Course content:	In a sound installation the mobility and freedom of the listener requires approaches to temporal and spatial structures that are different to those of concert music. Through a series of lectures and practical workshops, you look at many examples from music, visual art, sound sculpture, (interactive) media art and audio-walks. You are encouraged to experiment with mechanical, acoustic and electronic techniques for producing sound as well as different strategies for sound spatialisation. You develop and present a group project.
Objectives:	At the end of this course, you: ▪ are able to conceive, plan and realise a spatial sound work; ▪ are able to work with generative, sensitive or interactive sonic structures; ▪ are able to create and realise pieces in locations other than the traditional concert hall.
Programme objectives:	1.A.1, 1.A.11, 1.A.14, 1.B.10, 1.C.9, 1.C.10
Type of course:	Compulsory
Level:	Bachelor II
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	–
Teachers:	Justin Bennett
Credits:	4 ECTS
Literature:	t.b.a.
Work form:	Group lesson
Assessment:	Practical assignments concluding with a presentation. 80% attendance is required. Assessment criteria: • artistic quality, technical skills and originality shown in the assignments • level of command of techniques developed in order to realise and present the final project • ability to discuss the ideas, to address questions arising from them in the course of the classes and where appropriate to integrate the results of the discussion into the final project.
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Justin Bennett (j.bennett@koncon.nl)

AURAL TECTONICS

Course title:	**Aural Tectonics**
Osiris course code:	KC-AL-SO-AT
Course content:	Every location and the related modes of listening already constitute a sonic context. Aural Tectonics explores the site-specificity and context-dependency of sound by fostering a critical awareness of and attitude towards environmental ambiance. Founded in a practice-based approach, the course develops site-dependent strategies for listening, recording, mapping, synthesis and intervention over a range of spatial typologies, from outdoor public space to electroacoustic environments. The course is structured around a sequence of intensive projects promoting the development of locational modes of listening and personal approaches towards contextual ambiance.
Objectives:	At the end of this course, you: ▪ have gained hands-on experience with experimental recording and sound editing techniques; ▪ have experience with practice-based approaches for exploring sonic locale; ▪ have developed technical as well as theoretical means for addressing the site-specificity of sound; ▪ have a critical awareness of the registers of hearing and listening attention in every-day situations.
Programme objectives:	1.A.9, 1.A.11, 1.B.10, 1.C.1, 1.C.7
Type of course:	Compulsory
Level:	Bachelor III
Duration:	A two-week workshop after the autumn or spring holidays; 10 days of 5 hours
Prior qualifications/ prerequisites:	–
Teachers:	Raviv Ganchrow
Credits:	4 ECTS
Literature:	t.b.a.
Work form:	Workshop
Assessment:	Exercises, project and presentation: You must hand in several exercises involving experimental sound recording methods (intended to explore unconventional recording setups of sounds in the every-day environment); audio-editing techniques (as methods to explore auditory contexts); and strategies for sound spatialisation (that should expose innovative spatial ontologies of sound). The course concludes with a final project towards which the exercises build up. You are also expected to present your pieces to your peers and lead lively discussions about your findings. Assessment criteria: • Originality of approach and outcome manifestations • Ability to recognize and engage (artistically / technically) situated auditory contexts • Ability to create focused auditory attention • Willingness to engage in experimentation

	• Seriousness and dedication to ideas and the manners in which those ideas are expressed in the works / exercises • Ability to utilize constructive criticism
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Raviv Ganchrow (r.ganchrow@koncon.nl)

SCORES AND ARCHIVES IN ELECTROACOUSTIC COMPOSITION

Course title:	**Scores and Archives in Electroacoustic Composition**
Osiris course code:	KC-AL-SO-N&S
Course content:	You will investigate what it means to perform together in real-time over the Internet, by transmitting a musical performance as it happens to one or more locations while musicians at those locations respond back. You will explore and use the technologies that allow you to do that in addition to developing your own. You will find out how the Internet and live streaming works including uncovering the problems of latency and acoustic feedback. While you analyse and extract what is interesting about these problems as musicians, you can embrace them as sources of inspiration. You will work on creating scores, first by looking at alternative scores that have been used in electro acoustic performances by composers from the 20th century American Experimental tradition through today. Alternative scores include pen and pencil on paper, graphic design, physical objects, images, video, Apps, commercial notation programs, and computer programs. Composers include Pauline Oliveros to Alexander Schubert. You will look at the use of narratives, games, timelines, improvisation and fixed media in relation to music-technology objects.
Objectives:	At the end of this course, you: • will have comprehensive knowledge of Networked Music Performance history and technology; • can confidently design and implement a musical performance over the internet; • will have an overview of the history of electroacoustic music score creation in the 20th and 21st centuries; • are able to create and discuss a score for fixed media or one or more performers.
Programme objectives:	1.A.1, 1.A.11, 1.B.1, 1.B.10, 1.B.12, 1.C.7, 1.C.9
Type of course:	Compulsory
Level:	Bachelor IV
Duration:	1st semester, 120 minutes per week
Prior qualifications/ prerequisites:	–
Teachers:	Anne La Berge

Credits:	2 ECTS
Literature:	Scores and literature will be provided during the lessons
Work form:	Group lessons
Assessment:	Minimum attendance 80%. Students are assessed on the basis of their active contribution to the group sessions as well as a final presentation in class. Assessment criteria (presentation): • sufficient knowledge of historical electroacoustic context • reasoning and logic in analysing a score • sufficient knowledge of internet streaming technology and how it applies to music • able to articulate a personal aesthetic position with regards to internet technology in the performing arts Both the attendance requirement and the presentation need to be passed in order to pass this course.
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Anne La Berge (a.laberge@koncon.nl)

SOUND AND SPACE

Course title:	**Sound and Space**
Osiris course code:	KC-AL-SO-K&R
Course content:	Sound and Space is a seminar exploring interconnections between modes of sonic attention and concepts of space. The seminar is grouped around the themes of *echo*, *resonance* and *oscillation*, providing a cross-disciplinary reading of developments in spatial composition, sound art, audio technologies and architectural acoustics. The course covers examples from a broad range of sources serving to highlight distinctive correlations between epistemologies of sound and ontologies of space and place.
Objectives:	At the end of this course, you: ▪ have developed an awareness of the historicity of hearing; ▪ have an overview of historical paradigms of spatial sound and their contextual underpinnings; ▪ have acquired an ability to think through sonic contextuality and develop tools to critically engage contemporary discourses of sound and hearing.
Programme objectives:	1.A.9, 1.A.11, 1.A.20.KC, 1.C.1, 1.C.7
Type of course:	Compulsory
Level:	Bachelor IV
Duration:	2 semesters, 150 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	-

Teachers:	Raviv Ganchrow
Credits:	8 ECTS
Literature:	Reading lists and weekly hand-outs will be provided during the lessons
Work form:	Group lesson
Assessment:	For sonology bachelor IV students: You are required to submit a sound work with accompanying text & diagrams, which explores spatial affordances of a specific sonic site. Specificities, spatial ontologies and contexts of the given site are starting points for a work. The work should engage in empirical experimentation, exercising analytically precision and inventive approaches to the site-specificity of sound. Assessment criteria: • originality of approach and outcome manifestations • ability to create focused attention to spatial dependencies of in-situ sound (and its contexts) • ability to recognize, analyze and engage (artistically / technically) situated sounds For students taking this as an elective/other: You are required to submit a paper, which explores a specific context of spatial sound. The paper will address and elaborate upon the spatial ontologies of sound in that given context, and should display an analytical approach to the subject matter, and express novel approaches to the historicity of hearing. Assessment criteria: • structure and clarity of argument • originality of subject matter • clarity of insights • awareness of the context for the argumentation and potential contribution to aural cultures
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Raviv Ganchrow (r.ganchrow@koncon.nl)

SPATIAL COMPOSITION WITH WFS

Course title:	**Spatial Composition with WFS**
Osiris course code:	KC-SO-SPW-22
Course content:	Wave Field Synthesis (WFS) is a sound–production technique designed specifically for spatial audio rendering. Virtual acoustic environments are synthesized using a large number of small loudspeakers. The innovation of this technique is that sound can appear to emanate from desired virtual starting points, and then move through the space along many possible pathways.

	This course deals with the technical practicalities of using the system, as well as help with finding and realising artistic ideas for spatial composition through deeper discussions and listening and analysis sessions, also in the broader context of spatialized music in general. The course gives students the opportunity to develop their own projects over the year, and then to present the results at the end of the year in a small festival.
Objectives:	At the end of this course, you: • are able to work independently with Wave Field Synthesis software and hardware for spatial electronic music production; • are able to understand the possibilities of WFS in the broader context of spatialized music; • are able to engage in discussions about compositional aspects of spatial composition.
Programme objectives:	1.A.1, 1.A.2, 1.A.3, 1.A.7, 1.A.20.KC, 1.B.1, 1.B.9, 1.B.10, 1.C.3, 1.C.6, 1.C.7, 1.C.8, 1C.11
Type of course:	Compulsory
Level:	Bachelor III
Duration:	1 semester, 120 minutes per week
Prior qualifications/ prerequisites:	-
Teachers:	Ji Youn Kang
Credits:	4 ECTS
Literature:	–
Work form:	Group lessons
Assessment:	Minimum attendance 80%. Students are assessed on the basis of their active contribution to the group sessions as well as a spatial composition assignment of which the result is presented in a small festival in June. Assessment criteria (composition): • ability to produce independent creative work with WFS • ability to use and document the sound spatialization described in the course in a clear way • imaginative fulfilment of the compositional assignment
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Ji Youn Kang (j.kang@koncon.nl)

TECHNOLOGICAL SKILLS AND KNOWLEDGE

INTRODUCTION TO ELECTRONICS

Course title:	**Introduction to Electronics**
Osiris course code:	KC-SO-MP
Course content:	This is a workshop-style course, during which you work on three practical electronic measurements as an introduction to basic electronics. You will encounter terms like current, voltage, phase, frequency, amplitude, gain and different waveforms (i.e. sinewave, squarewave, sawtooth). You will learn about the basics of assembling your own circuit and the use of an oscilloscope, multi-meter and function generator. You will work together in small groups during three sessions.
Objectives:	At the end of this course, you: ▪ are able to interpret basic electronic circuits; ▪ are able to reproduce and create simple electronic devices; ▪ can interface sensors and actuators with existing computer systems; ▪ understand what is essential with the implementation of electronics: safety, stability and clear documentation.
Programme objectives:	1.A.9, 1.A.11, 1.B.10, 1.C.1, 1.C.7
Type of course:	Compulsory
Level:	Bachelor I
Duration:	6 lessons of 90 minutes each
Prior qualifications/ prerequisites:	–
Teachers:	Lex van den Broek
Credits:	3 ECTS
Literature:	–
Work form:	Practicals
Assessment:	You have to write 2 measurement reports and have to build your own small electronic device or instrument. Assessment criteria: • understanding of concepts introduced in the course • ability to use this understanding to interpret electronic circuits and to build and document a simple electronic device
Grading system:	Final result: Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Lex van den Broek (l.vandenbroek@koncon.nl)

DIGITAL STUDIO INTRODUCTION

Course title:	**Digital Studio Introduction**
Osiris course code:	KC-SO-ISD
Course content:	The basic tools for contemporary electroacoustic music production are a computer, a digital mixing desk and multiple loudspeakers. This course provides an introduction to working with a digital mixing desk and a number

	of standard sound production computer programs. Typical practices in a digital studio are explained, such as music production, recording and live performance.
Objectives:	At the end of this course, you: ▪ have working knowledge of the components in a digital studio setup; ▪ are able to work in a digital studio independently.
Programme objectives:	1.A.1, 1.A.9, 1.A.11, 1.B.10, 1.C.1, 1.C.7
Type of course:	Compulsory
Level:	Bachelor I
Duration:	120 minutes per week during 6 weeks at the beginning of the academic year
Prior qualifications/ prerequisites:	–
Teachers:	Johan van Kreij
Credits:	3 ECTS
Literature:	Online documentation
Work form:	Group lesson
Assessment:	Active participation and regular small assignments at the end of each session. These assignments take the form of preparing a setup or solving a problem. Students take turns and in dealing with such tasks, collaboration among students is encouraged. Assessment criteria: • understanding of the principles of the digital studio • ability to use this understanding in order to work independently and creatively in the studio
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Johan van Kreij (j.vankreij@koncon.nl)

REAL-TIME PROCESSES WITH MAX/MSP

Course title:	**Real-Time Processes with Max/MSP**
Osiris course code:	KC-SO-RMM
Course content:	Max is a programming tool that is relatively easy to learn, and it is especially suitable for creating and exploring real-time generative processes and the interaction with them. In Max, such processes can be defined as data streams or as audio generating structures. The aim is to research musicality in the interaction, and to define personal approaches and methods. The course starts with a brief introduction to the basics of Max.
Objectives:	At the end of this course, you: ▪ can design and program musical processes and master the basics of signal processing in Max/MSP;

	▪ can make abstractions of musical ideas and are able to implement them practically in real time.
Programme objectives:	1.A.3, 1.A.11, 1.B.1, 1.B.10
Type of course:	Compulsory
Level:	Bachelor I
Duration:	2 semesters, 120 minutes per week, 24 weeks
Prior qualifications/ prerequisites:	Digital Studio Introduction course
Teachers:	Johan van Kreij
Credits:	7 ECTS
Literature:	Online documentation of Max/MSP
Work form:	Group lesson
Assessment:	Throughout the year, three assignments are handed out. The first focusses on generative real-time processes, the second on real-time audio transformation and the third is based on a self-defined project. Assessment criteria (most important criteria first): • ability to create clearly laid out and well documented patches that work in a live situation • the live presentation of the output of each of the patches • showing proof of the ability to create solutions to musical challenges in code • imaginative musical thinking
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Johan van Kreij (j.vankreij@koncon.nl)

VOLTAGE CONTROL TECHNIQUES

Course title:	**Voltage Control Techniques**
Osiris course code:	KC-SO-VCT-22
Course content:	The growing complexity of electronic music production led to automation techniques such as voltage control. As a result, the attention of composers working in an analogue studio shifted: where at first they would design an abstract score that was 'filled in' with a montage of electronic sound material, they now designed a configuration of devices, of which the result was not only a sound but at the same time a structure. In this course, you explore the possibilities of sonology's modular voltage control system while working on a series of small assignments. The individual modules of the system have specific functions that are combined into a greater whole by means of control voltage. The links between the modules are not programmed but created physically with cables on a patch board. The

	planning and analysis of such configurations is the main subject of the lessons.
Objectives:	At the end of this course, you: ▪ are able to work independently with a modular voltage control system for electronic music production; ▪ are able to plan, execute, document and communicate complex configurations of equipment for electronic music production; ▪ are able to translate abstract ideas about musical structure into technical realisations.
Programme objectives:	1.A.1, 1.A.3, 1.A.9, 1.A.11, 1.B.1, 1.B.10
Type of course:	Compulsory
Level:	Bachelor I
Duration:	2nd semester, 120 minutes per week (group lessons) and 120 minutes per week (individual studio sessions), 15 weeks
Prior qualifications/ prerequisites:	Composing in the Analogue Studio
Teachers:	Kees Tazelaar
Credits:	4 ECTS
Literature:	Studio manual, patching examples provided during the lessons
Work form:	Group lesson
Assessment:	Students are assessed on the basis of their active contribution to the group sessions and a series of studies based on voltage control techniques and their documentation. Assessment criteria (studies): • ability to produce independent creative work using the modular voltage control system • ability to plan, execute and document this work in a clear and coherent way, from abstract structural ideas to musical realisation • imaginative fulfilment of the compositional assignment
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Kees Tazelaar (k.tazelaar@koncon.nl)

SIGNALS AND SYSTEMS 1

Course title:	**Signals and Systems 1**
Osiris course code:	KC-SO-S&ST
Course content:	These classes are designed to provide a solid background for dealing practically with the physical and mathematical representations of sound

	signals and sound processing systems. The course treats standard topics like the decibel, sampling, fundamental periodicity and the build-up of acoustical wave fields. The second semester is dedicated to Fourier Analysis.
Objectives:	At the end of this course, you: ▪ are able to describe the basic properties of a sound signal; ▪ have an in-depth understanding of the Fourier Transform and are able to apply it.
Programme objectives:	1.B.1, 1.B.3
Type of course:	Compulsory
Level:	Bachelor I
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	–
Teachers:	Peter Pabon
Credits:	5 ECTS
Literature:	Chapters 1, 2 and 4 from: Stan Tempelaars, *Signal Processing: Speech and Music*, (Lisse: Swets and Zetilinger, 1996). Additional PDF's will be distributed by email.
Work form:	Group lesson
Assessment:	A written test and a practical assignment. Compulsory attendance 80%, Assessment criteria (practical assignment): • Ability to derive in a structural manner an exact solution to a multifaceted acoustical problem with a self-programmed calculation scheme. • (written test): Mastering of the Fourier analysis and synthesis concepts and the FFT, • basic understanding of time-frequency relationships and resolution tradeoff.
Grading system:	Test: Numeric Practical assignment: Pass/Fail Both tests have to be passed in order to pass the course
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Peter Pabon (p.pabon@koncon.nl)

SIGNALS AND SYSTEMS 2

Course title:	**Signals and Systems 2**
Osiris course code:	KC-SO-S&ST
Course content:	These classes are designed to provide a solid background for dealing practically with the physical and mathematical representations of sound signals and sound processing systems. In part 2, attention shifts to system

	characterisation and the concepts of filtering, convolution, impulse response measurement, nonlinear systems and modulation techniques.
Objectives:	At the end of this course, you: ▪ are able to deal practically with the physical and mathematical representations of sound signals and sound processing systems; ▪ are able to conceptualise the relationships between various signal-processing models.
Programme objectives:	1.B.1, 1.B.3
Type of course:	Compulsory
Level:	Bachelor II
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	Signals and Systems 1
Teachers:	Peter Pabon
Credits:	5 ECTS
Literature:	Chapters 3, 5, 6, 7 and 8 from: Stan Tempelaars, *Signal Processing: Speech and Music*, (Lisse: Swets and Zetilinger, 1996). Additional PDF's will be distributed by email.
Work form:	Group lesson.
Assessment:	An impulse response assignment and a written test at the end of the course. Assessment criteria: • ability to delineate a self-chosen system of interest, to perform the acoustic measurement according to a predefined plan, and to report on the results of the experiment in a written form. Ability to work with dedicated analysis software. • mastering of system analysis concepts and their practical application and terminology, familiarity with constraints of the theoretical models, basic understanding of the statistical concept of correlation.
Grading system:	Impulse response assignment: Pass/Fail Written test: Numeric Both tests have to be passed in order to pass this course.
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Peter Pabon (p.pabon@koncon.nl)

PROGRAMMING AND MUSIC 1

Course title:	**Programming and Music 1**
Osiris course code:	KC-SO-P&M
Course content:	This course covers programming fundamentals, algorithmic composition and programming sound. Initially, programming fundamentals are studied using the programming language SuperCollider (sclang). This leads to algorithmic

	composition, its history, main concepts and concrete examples using the SC patterns library. Finally, the programming of sound will be discussed and topics will be implemented using SuperCollider ugens and their synthesis server.
Objectives:	At the end of this course, you: ▪ know and are able to practice the basics of programming in SuperCollider and can use programming for musical situations; ▪ have basic knowledge of algorithmic composition and its context; ▪ can implement and design sounds using algorithmic thinking and programming ideas.
Programme objectives:	1.B.1, 1.B.10
Type of course:	Compulsory
Level:	Bachelor I
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	–
Teachers:	Bjarni Gunnarsson
Credits:	8 ECTS
Literature:	The course material is featured on the course's website with new lectures and references to additional readings every week.
Work form:	Group lesson
Assessment:	Three practical assignments and one compositional study must be handed in. The assignments involve writing computer programs for different problems related to music and sound. Documentation must be included explaining the chosen solutions and their motivations. The assignments and the compositional study are each weighted at 25% of the final grade. Assessment criteria: • Computer programming basics • Ability to read and write computer code • Clarity in implementing technical solutions • Knowledge of computer music fundamentals
Grading system:	Final result: Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Bjarni Gunnarsson (b.gunnarsson@koncon.nl)

PROGRAMMING AND MUSIC 2

Course title:	**Programming and Music 2**
Osiris course code:	KC-SO-P&M
Course content:	Advanced programming in SuperCollider. The discussion focuses on building complex applications for use in a musical context. There will be practical work as well as lectures on application-building and large systems. Musical

	networks and dynamic systems will be discussed as well as how to deploy generative code in customised software. The final part will deal with programming audio in C and how low-level units can be created. An on-going theme is how to combine these technologies, which is reflected in the construction of a final, large-scale project.
Objectives:	At the end of this course, you: ▪ can design large applications for musical purposes; ▪ are able to apply complex generative systems such as networks, cellular automata and chaos theory; ▪ can develop low-level audio programs in C.
Programme objectives:	1.B.1, 1.B.10
Type of course:	Compulsory
Level:	Bachelor II
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	Programming and Music 1
Teachers:	Bjarni Gunnarsson
Credits:	7 ECTS
Literature:	The course material is featured on the course's website with new lectures and references to additional readings every week.
Work form:	Group lesson
Assessment:	Six assignments must be completed. Each one deals with a period of 4–6 weeks. The assignments involve the implementation of computer programs and realizing musical ideas. The sixth assignment deals with the C programming language. Each assignment must be accompanied by documentation. The first five assignments each are weighted at 15% of the final grade, the last assignment counts for 25%. Assessment criteria: • Advanced and low-level audio programming • To implement and use generative algorithms • Capable of being able to write about technical projects • Critical understanding of contemporary computer music
Grading system:	Final result: Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Bjarni Gunnarsson (b.gunnarsson@koncon.nl)

MUSIC CONTROLLERS WORKSHOP: DESIGN AND REALISATION

Course title:	**Musical Controllers Workshop: Design and Realisation**
Osiris course code:	KC-SO-MCW

Course content:	This course describes various ways of working with sensors and how signals from such sensors can be interpreted and used. It also offers insights into the necessary electronic components and the software related to musical control. A number of conversion methods (from sensor output into digital representation) are introduced, as well as the applicable data communication protocols. Before a computer-sensor setup can be taken on stage, some ideas about performative aspects will be developed. The final product of this workshop is a piece of hardware, which is designed to control musical parameters of a computer program.
Objectives:	At the end of this course, you: ▪ can design and realise a basic musical controller or electronic instrument; ▪ know what types of sensors are available and how they are used; ▪ can outline strategies for bridging physical gestures and musical control signals.
Programme objectives:	1.A.3, 1.A.9, 1.A.11, 1.B.10, 1.C.1, 1.C.2, 1.C.7
Type of course:	Compulsory
Level:	Bachelor II
Duration:	2 5-day workshops (one in the Fall, one in the Spring) and 4 group lessons of 120 minutes
Prior qualifications/ prerequisites:	–
Teachers:	Lex van den Broek and Johan van Kreij
Credits:	7 ECTS
Literature:	t.b.a.
Work form:	Group lesson / workshop
Assessment:	Students are assessed on the basis of their active contribution to the group sessions and a project realisation with documentation. Assessment criteria (project): • understanding of the use of sensors as musical controllers • ability to design and realise a sensor-based musical device
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Lex van den Broek (l.vandenbroek@koncon.nl), Johan van Kreij (j.vankreij@koncon.nl)

ANALYSIS/RE-SYNTHESIS

Course title:	**Analysis/Re-synthesis**
Osiris course code:	KC-SO-PHM1
Course content:	The central topic of this course is the liaison that perception has with the spectral and physical representations of a sound. A sound can be analysed

	and exactly resynthesized from its spectrum with the so-called Fourier Model, which presents a series of interesting and characteristic processing options. When detached from their strict mathematical ordering the standard analysis and synthesis schemes yield alternative and very practical processing models that allow manipulations in both time and frequency domain simultaneously. Models that follow this approach, like the instantaneous frequency model, and the band-limited oscillator will be studied in more detail.
Objectives:	At the end of this course, you: ▪ are able to analyse, process and re-synthesize a sound by using a spectral abstraction; ▪ are able to implement various analysis models that allow for the recognition of specific sound qualities; ▪ are able to translate and combine analysis results into a higher-order abstraction; ▪ are able to identify the similarities and specific differences between the synthesis models presented.
Programme objectives:	1.B.1
Type of course:	Compulsory
Level:	Bachelor III
Duration:	2nd semester, 120 minutes per week, 15 weeks
Prior qualifications/ prerequisites:	Signals and Systems 1 and 2
Teachers:	Peter Pabon
Credits:	4 ECTS
Literature:	t.b.a.
Work form:	Group lesson
Assessment:	A practical assignment that involves the implementation of a self-chosen analysis/re-synthesis chain and a demonstration/evaluation of its application. Assessment criteria: • understanding of the concept and potential of analysis-resynthesis of sound • ability to make the translation from a theoretical analysis/synthesis model to a practical (real-time) software/hardware implementation
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Peter Pabon (p.pabon@koncon.nl)

PHYSICAL MODELS

Course title:	**Physical Models**

Osiris course code:	KC-SO-PHM2
Course content:	The sound qualities that come out of the Fourier-based models (the main topic of this course in the previous year) do not necessarily represent the familiar physicality that perception expects from acoustical sounds. The predisposition of perception to listen for those acoustical markers that define a sound-production mechanism triggered an interest in a different synthesis technique, called Physical Modelling. Here, vibrating masses coupled together by springs that undergo frictional forces are the modelled abstractions, which can be implemented in real-time too. At a different timescale, the same perceptual predisposition will make us hook gestural interpretations to the modulations observed in a signal. In this way, a slow physical control model is added to the physical modelling of the vibration mechanism. This control model has a spatial or mechanical interpretation in an imaginary world.
Objectives:	At the end of this course, you: ▪ are able to analyse, process and re-synthesize a sound by using an advanced spectral abstraction; ▪ are able to work practically with Physical Models; ▪ are able to implement a Physical Model in various software environments.
Programme objectives:	1.A.1, 1.A.3, 1.A.11, 1.B.1, 1.B.3
Type of course:	Compulsory
Level:	Bachelor IV
Duration:	1st semester, 120 minutes per week, 15 weeks
Prior qualifications/ prerequisites:	Signals and Systems 1 and 2, Analysis/Re-synthesis
Teachers:	Peter Pabon
Credits:	4 ECTS
Literature:	t.b.a.
Work form:	Group lesson
Assessment:	A practical assignment on the development of a large-scale physical model and a demonstration of its interactive control. Assessment criteria: • understanding of the concept and potential of physical modelling • ability to produce a user manual that explains the working and bounds of the modelled physical system and its parametric controls.
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Peter Pabon (p.pabon@koncon.nl)

MUSICIANSHIP SKILLS

MUSIC THEORY 1+2

Course title:	**Music Theory 1+2**
Osiris course code:	KC-SO-AML1 / KC-SO-AML2
Course content:	This two-year music theory course is specifically designed for sonology students. It deals with various aspects of basic music theory, such as the fundamentals of diatonic harmony, analysis and form. A particular characteristic of the course is that theory is always put into practice, so that you immediately apply the material you are dealing with. This can for example be done through listening, singing and composing. You can bring music examples of your own interest, which are used as study or discussion material.
Objectives:	At the end of this course, you: ▪ have knowledge of elementary music theory, which allows you to work together with instrumental musicians; ▪ have the basic tools and skills to further develop your music theory knowledge independently.
Programme objectives:	1.A.1, 1.A.3, 1.A.11, 1.B.1, 1.B.2, 1.B.3
Type of course:	Compulsory
Level:	Bachelor I–II
Duration:	Lessons of 100 minutes per week in a combination of live and online lessons, following the KC annual schedule (teaching weeks, individual support weeks, and project and exam weeks)
Prior qualifications/ prerequisites:	The student should finish Music Theory 1 before being allowed to enter Music Theory 2.
Teachers:	Aart Strootman
Credits:	4 ECTS per academic year
Literature:	Hand-outs from teacher, repertoire brought by students
Work form:	Group lesson
Assessment:	Students are assessed on the basis of their active contribution to the group sessions and connected assignments. 80% attendance is required.
Grading system:	Participation sufficient/insufficient
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Suzanne Konings – Head of Music Theory Department (s.konings@koncon.nl)

HISTORY OF CONTEMPORARY MUSIC COMPOSITION

Course title:	**History of Contemporary Music Composition**
Osiris course code:	KC-SO-HCMP
Course content:	This course gives a chance to explore many of the main currents and counter-currents of thought and practice in composed music since the 1950's until today. We will discuss the ideas, aesthetics, compositional techniques

	and context of a range of influential and significant creative musicians from the last 70 years. The ways in which western compositional traditions have re-evaluated their relationship with different traditions and have enriched themselves through encounters with other art forms, non-traditional notations and improvisational practices will appear throughout the course. We will examine how compositional approaches throughout this period have explored different aspects of sound and listening, and how these explorations have involved experimentation into the performative, technological and perceptual realms. Each lesson on the course will focus on the work of a specific composer or a specific school or practice, where we will look at scores and listen to representative works.
Objectives:	At the end of this course, you: ▪ have an overview of the main currents in music from the late 1940s to the present; ▪ have studied the scores and recordings of representative post WO II repertoire; ▪ are able to communicate about this with various audiences at various levels.
Programme objectives:	1.B.1, 1.B.3, 1.B.4, 1.B.9, 1.C.1
Type of course:	Compulsory
Level:	Bachelor II
Duration:	2nd semester, 15 weeks, 120 minutes per week
Prior qualifications/ prerequisites:	Music Theory 1
Teachers:	Gabriel Paiuk and guests
Credits:	2 ECTS
Literature:	t.b.c.
Work form:	Group lesson
Assessment:	At the end of the semester, you need to write a critical essay based on resources provided by the teacher. In this essay you need to show how the knowledge of relevant compositional approaches and ideas from the last 70 years can inform and refine your critical understanding of musical creation. 80% Attendance is required. Assessment criteria: • knowledge of relevant compositional approaches and ideas from the last 70 years • critical understanding of musical creation • structure of argument
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Gabriel Paiuk (g.paiuk@koncon.nl)

LIVE ELECTRONIC MUSIC

Course title:	**Live Electronic Music**
Osiris course code:	KC-SO-LEM
Course content:	The aim of this course is to put improvisation with electronic musicians and traditional instrumentalists into practice. Various kinds of improvisation are analysed, and the ways that electronic processes have influenced thoughts about improvisation are discussed. At some point, the group will be split up into smaller improvising groups. A final presentation will be organised in the form of a concert at the end of the course.
Objectives:	At the end of this course, you: ▪ know the patterns that underlie improvisation, specifically those of the genre that makes use of electronic means; ▪ are able to improvise through electronic means, or by combining instrumental improvisation with electronics; ▪ are able to organise a concert presentation within a team setting.
Programme objectives:	1.A.1, 1.A.5, 1.A.6, 1.A.13, 1.A.17, 1.B.3, 1.B.6, 1.B.9, 1.B.12, 1.C.10, 1.C.13
Type of course:	Compulsory
Level:	Bachelor III
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	–
Teachers:	Johan van Kreij
Credits:	6 ECTS
Literature:	Reading and listening material will be provided
Work form:	Group lesson
Assessment:	The assessment is based on two projects. The first project, towards the end of the first semester, consists of a small group improvisation using electronic means. Group size approximately 3 students, equipment will be provided. The second project is a public presentation organised with the entire class. This presentation consists of various groups—each made up of fellow students—performing a free improvisation. Assessment criteria: • Participation in and contribution to the small group improvisation • The aural evaluation of this improvisation based on a recording, discussing approaches in creating the musical result • Contribution to helping organise a public presentation and the performance during that presentation • Participation in the in-class discussions and exchanges following listening sessions
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Johan van Kreij (j.vankreij@koncon.nl)

MUSIC ANALYSIS AND MIXED MEDIA COMPOSITION

Course title:	**Music Analysis and Mixed-media Composition**
Osiris course code:	KC-SO-AML4
Course content:	The main goal of this course is to expose and familiarise you with diverse approaches to the structuring of a music/sound composition, taking as a fundamental basis the analysis of significant landmarks of 20th-century music. The intended outcome of this analytical work is to arrive at an awareness of the essential link between procedures, components and compositional strategies, and a resulting musical form. This awareness is as well fostered through your own practice, within which you are guided towards the realisation of a musical work that articulates micro and macro levels of organisation. Works and strategies of composers like Anton Webern, György Ligeti, Helmut Lachenmann, Salvatore Sciarrino or Mathias Spahlinger, among others, are dealt with. The dialogue and interaction between the worlds of instrumental music and electronic sound production are encouraged and explored. **Please note:** Bachelor IV students during 22/23 follow this course during the 1st semester only, worth 2 ECTS.
Objectives:	At the end of this course, you: ▪ are able to compose a piece for mixed media, comprising simultaneous acoustic and electronic sources; ▪ understand how the articulation of a musical form affects the listener´s perception and are able to organise the components involved within a composition accordingly; ▪ have incorporated analytical tools to understand the internal organisation of a non-tonal work.
Programme objectives:	1.B.1
Type of course:	Compulsory
Level:	Bachelor III Bachelor IV during 22/23
Duration:	BIII 2 semesters, 120 minutes per week BIV 1 semester, 120 minutes per week
Prior qualifications/ prerequisites:	Music Theory 1 and 2
Teachers:	Gabriel Paiuk
Credits:	BIII: 4 ECTS BIV during 22/23: 2 ECTS
Literature:	t.b.a.
Work form:	Group lesson
Assessment:	Students are assessed on the basis of their active contribution to the group sessions and the composition and realisation of a work for mixed media. 80% attendance is required. Assessment criteria: • understanding of the formal and material aspects at play in a compositional endeavour • ability to explore the potential articulation of electronic and acoustic sources in a composition

	• ability to discuss and develop compositional ideas throughout a creative process
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Gabriel Paiuk (g.paiuk@koncon.nl)

ACADEMIC SKILLS

COLLOQUIUM PARTICIPATION

Course title:	**Colloquium Participation**
Osiris course code:	KC-AS-SO-COLQ
Course content:	Throughout the academic year, a two-hour weekly colloquium takes place. Ten of these take the form of presentations by faculty, alumni and guest speakers, and the rest are presentations by each student from the fourth year of the bachelor's programme and both first and second years of the master's programme. During each colloquium, two students present aspects of their research projects. The colloquia are attended by four or five Sonology faculty members, by students from the Sonology bachelor's and master's programmes, and by students from other departments of the conservatoire. The Colloquia are moderated by faculty member JI Youn Kang, who in the week preceding the colloquium distributes information about the upcoming presentations to all participating students. The moderator introduces the speakers at the beginning of the colloquium and leads the subsequent discussions. The colloquium presentation is an important moment for the evaluation of a student's progress, about which the teachers of the Bachelor of Music in Sonology hold regular consultations.
Objectives:	At the end of this course, you: ▪ have an overview of a broad range of current developments in electroacoustic music composition, computer programming and sound art; ▪ are able to reflect and discuss topics in the field of electroacoustic music and sound art with peers.
Programme objectives:	1.A.10, 1.A.13, 1.A.17, 1.B.1, 1.B.10
Type of course:	Compulsory
Level:	Bachelor I–IV
Duration:	2 semesters, 120 minutes per week
Prior qualifications/ prerequisites:	The student should finish each year of this course before being allowed to enter the next.
Teachers:	Richard Barrett, Bjarni Gunnarsson, Ji Youn Kang, Fani Konstantinidou, Johan van Kreij, Peter Pabon, Kees Tazelaar
Credits:	2 ECTS per academic year
Literature:	
Work form:	Group lesson

Assessment:	Active participation in discussions and 80% attendance is required. Assessment criteria: • ability to present ideas in a clear, logically structured and interesting way • ability to use audiovisual material and/or literature references in a way that supports and enhances the presentation • ability to discuss the presentation actively and fluently
Grading system:	Participation sufficient/insufficient
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Ji Youn Kang (j.kang@koncon.nl)

NEW ARTS AND MUSIC THEORIES

Course title:	**New Arts and Music Theories**
Osiris course code:	KC-AS-SO-NAMT
Course content:	This course is offered to all first-year bachelor's students of ArtScience, Composition and Sonology. It is aimed to nurture an awareness of the possibilities of reciprocal expansion that exist between the domains of theory and artistic practice. The course tackles areas of enquiry that traverse both the substrate of artistic practice and theoretical research, articulated in thematic segments throughout the year. These segments comprise questions on the nature of: Language, Materiality, Media and Technology, Sensation and Affect, Ecology, Culture and the Collective. These thematic axes promote the familiarisation of the students with recent as well as historical theoretical tools, through an exposure to texts and artistic practices sourced in different traditions and knowledge disciplines. The course includes the participation of a substantial number of guest teachers coming from diverse areas and institutions across the Netherlands (and beyond) including Musicology, Art History, Media Theory, Performance Studies, Cultural Critique as well as art practitioners. The course aims to foster the receptiveness of students for open-ended and transdisciplinary explorations in which the role of histories and models of thought become inherent in the artistic process.
Objectives:	At the end of this course, you: ▪ have knowledge and the ability to discuss a wide range of approaches that inform contemporary thought within and in relation to artistic practice.
Programme objectives:	1.A.11, 1.B.8, 1.B.16
Type of course:	Compulsory
Level:	Bachelor I
Duration:	120 minutes per week during two semesters, 30 weeks

Prior qualifications/ prerequisites:	–
Teachers:	David Dramm, Eric Kluitenberg, Gabriel Paiuk and guests
Credits:	3 ECTS
Literature:	t.b.a.
Work form:	Group lesson
Assessment:	At the end of the second semester you develop (in groups) and present to the class a plan for a project/prototype/draft of a work that engages with a number of problems/challenges arising from one of the areas of theoretical enquiry developed throughout the year (Media, Sensation and Cognition, Ecology and Collectivity, Materiality or Language). Assessment criteria: • awareness of the utility of a dialogue between artistic practice and theoretical enquiry • ability to research and account for different theoretical perspectives into specific problems • ability to express clearly the arguments dealt with in the project presented to the class
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Gabriel Paiuk (g.paiuk@koncon.nl)

WRITING SKILLS

Course title:	**Writing Skills**
Osiris course code:	KC-AS-SO-WS
Course content:	This course focuses on refining your ability to organise and express your ideas in written English. Practical exercises oriented towards developing these skills in the context of your own research directives are mandatory components for the course. Other exercises will bolster your command of writing professional texts in English (e.g., reviews, critical responses to texts, programme notes, grant proposals, article-abstracts, various online writings, and technical descriptions relevant to their work). You will also gain knowledge of (or review) the fundamentals necessary for proper academic citation of a wealth of research sources. Instructor feedback will be provided on an individual basis, thereby helping to address and accommodate a wide range of challenges. Group discussion of students' research as well as a variety of texts, both within and outside the field of your discipline, will also play a significant role in the course. This will help you to refine your presentation skills by providing a forum for the elaboration and evolution of your ideas.
Objectives:	At the end of this course, you will:

	▪ be able to write independently about your work within the context of electronic music production; ▪ have established your research topic and begun the thesis writing process; ▪ be able to apply a formal citation style (Chicago style) to written texts in connection with your thesis; ▪ have improved your ability to present your work, as well as to write texts such as biographies, programme notes, reviews, grant proposals, and other texts related to your work.
Programme objectives:	1.A.9, 1.A.11, 1.B.7, 1.B.8, 1.C.1, 1.C.8, 1.C.10
Type of course:	Compulsory (elective for bachelor III or IV composition students)
Level:	Bachelor III
Duration:	120-minute group lesson per week during the 1st semester, 60-minute group lesson per week during the 2nd semester
Prior qualifications/ prerequisites:	–
Teachers:	Thomas Aldrich
Credits:	4 ECTS
Literature:	Course kit and in-class presentations
Work form:	Group lesson
Assessment:	Students are assessed on the basis of their active contribution to the group sessions and a selection from their responses to assignments given throughout the year (Biography, Programme Notes, Text Summary, Research Proposal, Bibliography, Outline and Introduction of Thesis). Assessment criteria (assignments): • coherence and incisiveness of thought • use of sources • language and tone • clarity of written discourse • logic, relevance, and strength of argument
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Thomas Aldrich (t.aldrich@koncon.nl)

MUSIC COGNITION

Course title:	**Music Cognition**
Osiris course code:	KC-AS-SO-MC
Course content:	This course offers an accessible introduction and overview of the multidisciplinary topic of music cognition, which deals with the perceptual and cognitive bases of performing, composing, and listening to music. Covered topics will include perceptual mechanisms underlying pitch and

	rhythm perception; interactions of musical processing with emotion, language, memory and movement; music acquisition processes and expertise; brain processes related to music and applications of music in health settings.
Objectives:	At the end of this course, you: • have a broad overview of the field of music cognition and its main relevant topics and findings; • have an understanding of musical building blocks that are relevant to perception, understanding and creation of music; • have an understanding of the methods by which music cognition research achieves its results; • gain experience in conceptualizing your own application based on this knowledge.
Programme objectives:	1.C.1, 1.C.7, 1.C.11
Type of course:	Compulsory
Level:	Bachelor III
Duration:	15 two-hour sessions in semester 2
Prior qualifications/ Pre-requisites:	-
Teachers:	Rebecca Schaefer
Credits:	2 ECTS
Literature	Psychology of Music: From Sound to Significance, 2nd Ed., 2017. S.-L. Tan, P. Pfordresher & R. Harré. Routledge, New York, NY Assorted additional chapters and articles
Work form:	Seminars
Assessment:	Attendance & active participation (20%) Weekly quiz questions on the reading (30%) Design assignment and presentation (50%) Assessment criteria (design assignment and presentation): • integration of course topics into design • cohesive communication of design idea • critical discussion of design idea
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT
Contact:	Rebecca Schaefer (r.schaefer@koncon.nl)

COLLOQUIUM PRESENTATION

Course title:	**Colloquium Presentation**
Osiris course code:	KC-AS-SO-CP

Course content:	Throughout the academic year, a two-hour weekly colloquium takes place. Ten of these take the form of presentations by faculty, alumni and guest speakers, and the rest are presentations by each student from the fourth year of the bachelor's programme and both first and second years of the master's programme. During each colloquium, two students present aspects of their research projects. The colloquia are attended by four or five Sonology faculty members, by students from the Sonology bachelor's and master's programmes, and by students from other departments of the conservatoire. The Colloquia are moderated by faculty member Ji Youn Kang, who in the week preceding the colloquium distributes information about the upcoming presentations to all participating students. The moderator introduces the speakers at the beginning of the colloquium and leads the subsequent discussions. The colloquium presentation is an important moment for the evaluation of a student's progress, about which the teachers of the Bachelor of Music in Sonology hold regular consultations.
Objectives:	At the end of this course, you: ▪ are able to give a coherent public presentation of your work and ideas; ▪ are able to answer questions and discuss matters arising from the presentation with peers.
Programme objectives:	1.A.10, 1.A.11, 1.A.13, 1.C.10
Type of course:	Compulsory
Level:	Bachelor IV
Duration:	1 hour
Prior qualifications/ prerequisites:	The student should finish each year of this course before being allowed to enter the next.
Teachers:	Richard Barrett, Bjarni Gunnarsson, Ji Youn Kang, Fani Konstantinidou, Johan van Kreij, Peter Pabon, Kees Tazelaar
Credits:	3 ECTS
Literature:	–
Work form:	Group lesson
Assessment:	Presentation and participation in the discussion. Assessment criteria (presentation): • ability to present ideas in a clear, logically structured and interesting way • ability to use audiovisual material and/or literature references in a way that supports and enhances the presentation • ability to discuss the presentation actively and fluently
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Ji Youn Kang (j.kang@koncon.nl)

PREPARATION FINAL PRESENTATION

Course title:	**Preparation Final Presentation**
Osiris course code:	KC-AL-SO-PFP
Course content:	As part of their final presentations, Sonology fourth-year bachelor's students work on individual projects and a written thesis (see Specialisation Composition/Performance/Research). In the second semester, they give a presentation during the weekly Colloquium (see Colloquium Presentation). The artistic content is supervised by a mentor, and the third year of the programme offers a Writing Skills course. During the lessons Preparation Final Presentation, however, we primarily discuss the format in which the content of the thesis and artistic work will be presented. What is the supposed foreknowledge of your audience, and how do you place your subject(s) in a perspective in such a way that your argument is clear? How do you look at the content of your presentation from the outside? How do you participate in a discussion without becoming defensive? Each student will give two 30-minute trial presentations: one in which the focus is on an artistic work, and one in which some research aspects are presented. The teacher also gives two presentations. The teacher and students may interrupt the presentation with questions and remarks about the content, form and structure. After each presentation a discussion will take place. These discussions are moderated by the teacher and can take as much time as the presentation.
Objectives:	At the end of this course, you: • are able to present your projects and research coherently • are able to participate in discussions in a constructive way • have an outsider's view on your work and the way you present it
Programme objectives:	1.A.9, 1.A.11, 1.A.12, 1.A.13, 1.B.1, 1.B.3, 1.B.7, 1.C.7, 1.C.8, 1.C.9, 1.C.10
Type of course:	Compulsory
Level:	Bachelor IV
Duration:	1 semester, 120 minutes per week
Prior qualifications/ prerequisites:	-
Teachers:	Ji Youn Kang
Credits:	4 ECTS
Literature:	Materials provided during the lessons
Work form:	Group lessons
Assessment:	Minimum attendance 80%. Students are assessed on the basis of their active contribution to the group sessions as well as two in-class presentations of approximately 30 minutes. Assessment criteria (presentations): • coherent communication of ideas and content • well-structured argument • good interaction with the discussion's participants
Grading system:	Pass/Fail (Osiris: Presentation 100%)
Language:	English
Schedule, time, venue:	See ASIMUT schedule

Information:	Ji Youn Kang (j.kang@koncon.nl)

PROFESSIONAL PREPARATION

START-UP!

Course title:	**Start-Up!**
Osiris course code:	KC-AL-FYF
Course content:	Start-Up! has two main goals: 1. Helping you build a broad network of fellow students; 2. Making a smooth start at the Royal Conservatoire. Start-Up! introduces new students to the Royal Conservatoire and its practical, educational, creative, social and artistic possibilities. During a full week of music making, attending lectures, cooperating and exploring future educational opportunities, Start-Up! engages you right from the start. Start-Up! consists of daily rehearsals with the First Year Choir, as well as many workshops, lectures, meetings and performances. This course is part of the Career Skills courses. These courses prepare you for the professional world by offering you the opportunity to acquire skills for your future career. Recurring topics are communication, self-management, artistic identity, and becoming aware of career possibilities.
Objectives:	At the end of this course, you: ▪ know your way around the Royal Conservatoire; ▪ have started to build your network of fellow students from all departments; ▪ are well-informed about your study programme; ▪ have gained greater awareness of what is required to be a successful student; ▪ have a greater awareness of health & wellbeing in the music profession (e.g. you know how to protect your ears); ▪ have gained insight into how the Royal Conservatoire could contribute to reaching your goals as a professional musician.
Programme objectives:	1.A.5, 1.C.11, 1.C.13
Type of course:	Compulsory
Level:	Bachelor I
Duration:	One week full-time
Prior qualifications/ prerequisites:	
Teachers:	A large variety of teachers from the Royal Conservatoire and from the professional field related to your future practice.
Credits:	2 ECTS
Literature:	Start-Up! brochure and information on the KC Portal. A list of resources and information about how to set up as an independent artist can be found at the Career Development Office and Podiumbureau page on the KC Portal.
Work forms:	Plenary sessions, workshops, group lessons

Assessment:	A minimum of 80% attendance
Grading system:	Participation sufficient/insufficient
Language:	English
Schedule, time, venue:	Monday to Friday during the first week of the academic year, at the Royal Conservatoire, The Hague
Information:	Caroline Cartens (startup@koncon.nl)

TUTORING

Course title:	**Tutoring**
Osiris course code:	KC-AL-PF
Course content:	First-year students entering the Royal Conservatoire are assigned a tutor. You remain with this tutor for the first three years of the bachelor's programme. The tutor's role is to help you to reflect on your study and to monitor your study progress. In order to become independent reflective practitioners students need self-regulation skills and habits. The tutor can offer you several tools to develop these skills, based on your needs and preferences. In the tutoring toolbox there are 4 categories for tools: foundation, intention, attention and reflection. In the course of the study year you and your tutor will decide together which tools are interesting and relevant to explore. You will show evidence of your development and study habits f.i. through practical assignments, reports, recordings, or in conversation. Students can also decide to keep the reflective practicing journal 'Musician's Log' developed by Susan Williams. The tutor will have consultations with students individually and in small groups. The tutor is also available to you on request. Consultations with the tutor are confidential. Study progress will be an important topic in private consultations. The tutor will consult with the head of department or coordinator about study related issues, without revealing any sensitive information. Students are encouraged to take responsibility and initiative and increasingly take ownership of their development.
Objectives:	At the end of this course, you: ▪ are able to reflect on your study progress and communicate about it with others; ▪ are able to reflect on your personal and artistic growth; ▪ have learned self-regulation tools and habits and are able to strategically put them to use in your own practice.
Programme objectives:	1.A.2, 1.A.7, 1.A.10, 1.B.9, 1.C.1, 1.C.2, 1.C.3, 1.C.8, 1.C.16
Type of course:	Compulsory
Level:	Bachelor I-III
Duration:	Group meetings: in September, additional meetings to be decided by the tutor

	Private meetings: by appointment (at least three, but more individual meetings can take place if required)
Prior qualifications/ prerequisites:	
Tutors:	Daniël Brüggen, Lilita Dunska, Carolien Drewes, Noa Frenkel, Manon Heijne, Miro Herak, Jarmo Hoogendijk, Anne La Berge, Gabriel Paiuk, Roger Regter, Ana Sanchez Donate, Yvonne Smeets, Julia Stegeman, Rixt van der Kooij, Susan Williams
Credits:	2 ECTS per academic year
Literature:	Handouts from your tutor, the tutoring toolbox and the reflective practicing journal 'Musician's Log' by Susan Williams. These can be found in the Tutoring Team on MS Teams.
Work forms:	Group and individual meetings
Assessment:	At the end of each academic year, your tutor will assess your development related to your self-regulation skills and habits. Together with your tutor you will design a custom assignment that addresses those elements from the tutoring toolbox that are most relevant for your development. The assignment can lead to evidence through activities, assignments and study habits in which you show that you have monitored and engaged with your personal development in a professional, autonomous and critical manner. Assessment criteria: • reflective skills • strategic pursuit of goals • initiative • communication
Grading system:	Pass/Fail
Language:	English or Dutch
Schedule, time, venue:	Group and individual sessions. As for the individual meetings, both you and your tutor can take the initiative.
Information:	Yvonne Smeets – coordinator Tutoring (y.smeets@koncon.nl)

SOUND ENGINEERING IN ELECTRONIC MUSIC 1

Course title:	**Sound Engineering in Electronic Music 1**
Osiris course code:	KC-SO-GLT

Course content:	This course intends to give a basic understanding of practical studio and live sound reinforcement techniques. Different types of signal flows which can be encountered in a studio or concert situation will be dealt with theoretically and practically, starting from how to make a basic audio recording or multichannel playback in a studio, to how to plan and realise a multichannel electroacoustic music performance. Students are responsible for preparing and implementing the Sonology Discussion Concerts under the teacher's guidance, which take place five times a year. Each concert involves class preparation, preparation at home and two days of preparation in the concert hall including sound checks and rehearsals. There is a group evaluation after each concert.
Objectives:	At the end of this course, you: ▪ are more familiar with various types of studio and live sound equipment; ▪ are able to follow and troubleshoot signal flows; ▪ are able to make a (basic) instrumental recording in a studio or concert; ▪ are able to participate in a technical crew for a small-scale concert or small-scale festival; ▪ are able to independently prepare a small-scale concert performance, including amplification; ▪ are able to compile and understand equipment lists, patch lists, stage plans and time schedules for a concert.
Programme objectives:	1.A.11, 1.A.13, 1.A.14, 1.A.17, 1.A.19, 1.A.20.KC, 1.B.10, 1.C.9, 1.C.13, 1.C.14
Type of course:	Compulsory
Level:	Bachelor II
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	–
Teachers:	Marko Uzunovski
Credits:	4 ECTS
Literature:	To be determined
Work form:	Group lesson, practicals
Assessment:	Test 1: A practical test of studio signal-flow techniques in March (Pass/Fail). Test 2: Participation as a crew member in the Sonology Discussion Concerts (Pass/Fail). Both tests have to be concluded with a Pass in order to pass the course.
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Marko Uzunovski (m.uzunovski@koncon.nl)

SOUND ENGINEERING IN ELECTRONIC MUSIC 2

Course title:	**Sound Engineering in Electronic Music 2**
Osiris course code:	KC-SO-GLT
Course content:	Semester 1 of this course deals with the theory and practice of microphone types and working principles as well as grounding and interfacing practice. Applications of microphones are studied in stereo microphone recording techniques and in sound reinforcement situations. As a preparation for the second part of the course, an intensive frequency hearing training is performed. Semester 2 of the course deals with the basic principles of mixing and balancing where the relationship between music and sound is studied in detail. This part of the course is organized in intensive hands-on sessions. The group will be split up in smaller groups of 2 students.
Objectives:	At the end of this course, you: ▪ are able to independently design a simple microphone setup, including positioning and focusing. This both for recording and amplification, bearing in mind the musical material and the acoustical and architectural properties of the surroundings; ▪ are able to independently recognise frequency ranges and formant areas to an accuracy of ± 1 octave, expressed in Hertz (Hz). ▪ are able to independently decide on mix questions during a multitrack mixing process, based on the relation between sound and the musical material in question.
Programme objectives:	1.A.11, 1.A.13, 1.A.14, 1.A.17, 1.A.19, 1.A.20.KC, 1.B.10, 1.C.9, 1.C.13, 1.C.14
Type of course:	Compulsory
Level:	Bachelor III
Duration:	2 semesters, 120 minutes per week, 30 weeks
Prior qualifications/ prerequisites:	Sound Engineering in Electronic Music 1
Teachers:	Paul Jeukendrup
Credits:	4 ECTS
Literature:	To be determined
Work form:	Group lesson, practicals
Assessment:	Test 1: A written test at the end of the first part of the course, involving both theory questions and cases (numeric result). Test 2: Participation in the intensive mix classes (Pass/Fail). Both tests have to be concluded with a positive result in order to pass the course.
Grading system:	Numeric
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Paul Jeukendrup (p.jeukendrup@koncon.nl)

EDUCATIONAL SKILLS FOR CREATIVE ARTISTS 1

Course title:	**Educational Skills for Creative Artists 1**
Osiris course code:	KC-ED-ESCA
Course content:	Educational Skills for Creative Artists 1 is the first part of a three-part course for sonology and composition students, which runs over two years and contains three semesters. In this module you reflect on personal and general creative processes and practices and explore new learning environments in order to design and develop your own very diverse and unique workshop and teaching practices in the future. You discover innovations and technology in teaching creative music. Through literature, practical examples and discussions, you will gain new insights in creative thinking in education and in designing new sound related projects in education.
Objectives:	At the end of this course, you: ▪ begin to develop metacognitive awareness about creative and critical thinking within yourself; ▪ know, understand and apply creative explorative pedagogies in sound explorations and have learned about the history of composition teaching movements; ▪ know and understand how creative processes work by connecting these to qualitative and quantitative sciences (music pedagogy, psychology, neuroscience, biographical research) and by analyzing creative introspection; ▪ can get in touch with the work field: seeing and evaluating different examples of teaching; involving creative processes in music and you know how to convert an idea into a project; ▪ are able to give feedback on a fellow student's work, knowing when to employ both heuristic and directive feedback and are able to receive feedback and to process it constructively; ▪ understand the value of creative thinking in music education and education in general.
Programme objectives:	1.A.7, 1.A.10, 1.A.14, 1.A.15, 1.A.16, 1.A.19, 1.B.9, 1.B.12, 1.B.15, 1.C.7, 1.C.8, 1.C.11, 1.C.13, 1.C.14
Type of course:	Compulsory
Level:	Bachelor II
Duration:	1st semester, 8 x 90 minutes
Prior qualifications/ prerequisites:	
Teachers:	Irene Ruipérez Canales (sonology) & Maja Matić (composition)
Credits:	2 ECTS
Literature:	- Delalande, François (2009): La nascita della musica. FrancoAngeli - Delalande, François (2017): The Ontogenesis of Musical Conducts and its Pedagogical Implications. - Kelchtermans, Geert (2014): Stories making sense. Teacher development from a narrative-biographical perspective.

	- Hamann, Donald L. (ed.) (1991): Creativity in the Music Classroom. Reston: Music Educators National Conference - Hickey, Maud (ed.) (2003): Why and how to teach Music Composition: A new horizon for music education. Reston: MENC - R. Crozier, P. Harris (2000): The Music Teacher's Companion: A Practical Guide. London: ABRSM.
Work form:	Group lessons, self-study and teaching practice or project work with peer learning.
Assessment:	1) Continuous assessment of participation, engagement and attendance of at least 80%. 2) In-class 10-minute presentation of an article, book or topic in relation to the given content. Assessment criteria (presentation): • clarity and structure of argument • critical judgement • situating the presented text into the historical context of the composition teaching movements • linking the presentation to the sciences on creativity we discussed in class • a subjective view of the text: how does it contribute to your development as a teacher in critical and creative perspective • presentation skills. Assessment Date (2): At the end of semester 1. The exact date will be confirmed by the teacher. 3) An in-class moment in which you are asked to give heuristic and directive feedback to peers in an educational context. Assessment criteria (giving feedback): • appropriate use of heuristic and directive feedback Assessment Date (3): During semester 1. The exact date will be confirmed by the teacher. All assessments will have to be passed in order to pass this course.
Grading System:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Julia Stegeman – j.stegeman@koncon.nl Marijke van den Bergen – m.vdbergen@koncon.nl

EDUCATIONAL SKILLS FOR CREATIVE ARTISTS 2

Course title:	**Educational Skills for Creative Artists 2**

Osiris course code:	KC-ED-ESCA
Course content:	Educational Skills for Creative Artists 2 is the second part of a three-part course for sonology and composition students, which runs over two years and contains three semesters. In this module you learn how to analyse, lead and assess a creative activity and to present in front of a class. You learn to develop interdisciplinary, creative workshops through the study of stimulating and innovative models. Under the guidance of the teachers you will create a workshop for peers and learn how to present it.
Objectives:	At the end of this course, you: ▪ have created awareness and know, understand and are able to employ the (cycle of) processes of creative and critical thinking when developing a piece or project; ▪ are able to speak freely and give a presentation in front of an audience about a studied subject or project; ▪ know, understand and are able to employ different didactic work processes while teaching; ▪ begin to develop empathic understanding of your students in the context of creative and critical thinking; ▪ understand when an educational process truly involves the creative process.
Programme objectives:	1.A.7, 1.A.10, 1.A.14, 1.A.15, 1.A.16, 1.A.19, 1.B.9, 1.B.12, 1.B.15, 1.C.7, 1.C.8, 1.C.11, 1.C.13, 1.C.14
Type of course:	Compulsory
Level:	Bachelor II
Duration:	2nd semester, group meetings and projects to be defined
Prior qualifications/ prerequisites:	Educational Skills for Creative Artists 1
Teachers:	Irene Ruipérez Canales (sonology) & Maja Matić (composition)
Credits:	2 ECTS
Literature:	- Dennis, Brian (1975): Projects in Sound. Universal Editions (London) - Jensen, Eric (2008): Brain-based learning: The new paradigm of teaching. Corwin Press - Self, George (1967): New sounds in class. A contemporary approach to music. (Universal Edition) - Schafer, R. Murray (1975): The rhinoceros in the classroom. (Universal Edition) - Abeles, Harold F., Charles R. Hoffer and Robert H. Klontman (1995) Foundations of music education. New York: Simon & Schuster Macmillian - Lipman, Matthew (1991) Thinking in education. New York: Cambridge University Press - R. Crozier (2004) All together: teaching music in groups. London: ABRSM - Boardman, Eunice (ed.) (2002) Dimensions of musical learning and teaching – A different kind of classroom. Reston: The National Association for Music Education - Thomas, Ronald B., Manhattanvile music curriculum program: Final report http://eric.ed.gov/?id=ED045865.

	- Walker, Robert. (1984) Innovation in the Music Classroom: II The Manhattanville Music Curriculum Project. Psychology of Music, Vol. 12, No. 1, 25-33 - Paynter, John & Aston, Peter (1970): Sound & Silence. Cambridge University Press
Work form:	Group lessons, self-study and teaching practice or project work with peer learning.
Assessment:	1) Continuous assessment of participation, engagement and attendance of at least 80%. 2) A short written description of your project proposal. Assessment criteria (project proposal): • show personal use of creative and critical thinking in practice (e.g. project design) • balanced use of critical and creative thinking in the educational process itself 3) In-class 10-minute presentation and analysis of your project proposal. Assessment criteria (presentation): • understanding and application of different didactic work processes • clarity and structure • presentation skills (e.g. engagement with the audience, speaking freely) Assessment Date (2,3): At the end of semester 2. The exact date will be confirmed by the teacher. All assessments will have to be passed in order to pass this course.
Grading System:	Pass/Fail
Language:	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Julia Stegeman – j.stegeman@koncon.nl Marijke van den Bergen – m.vdbergen@koncon.nl

EDUCATIONAL SKILLS FOR CREATIVE ARTISTS 3

Course title:	**Educational Skills for Creative Artists 3**
Osiris course code:	KC-ED-ESCA
Course content:	Educational Skills for Creative Artists 3 is the third part of a three-part course for sonology and composition students, which runs over two years and contains three semesters. In this module the material offered in ES 1 and 2 is put into practice through developing an educational project with peers and for peers, in which you

	show to be able to lead a workshop and present it to and execute it with an audience.
Objectives:	At the end of this course, you: ▪ know and understand the difference between composing for a student (or group of students) and allowing the student(s) to compose by themselves; understanding the value of letting the student(s) create by themselves; ▪ have the information and resources to successfully develop a creative activity from scratch in cooperation with peers; ▪ have practical (methodological) strategies to lead a project/activity and engage with an educational situation; ▪ have the basic knowledge to convert an idea into a project (shaping the idea; writing a proposal; planning and design; construction and execution; completion and feedback); ▪ have the knowledge to lead a project/activity (communication, the sequence of activities, class management, time management, adaptability and feedback together with peers).
Programme objectives:	1.A.7, 1.A.10, 1.A.14, 1.A.15, 1.A.16, 1.A.19, 1.B.9, 1.B.12, 1.B.15, 1.C.7, 1.C.8, 1.C.11, 1.C.13, 1.C.14
Type of course:	Compulsory
Level:	Bachelor III
Duration:	1st semester, group meetings and projects to be defined
Prior qualifications/ prerequisites:	Educational Skills for Creative Artists 1 & 2
Teachers:	Irene Ruipérez Canales (sonology) & Maja Matić (composition)
Credits:	2 ECTS
Literature:	- Paynter, John & Aston, Peter (1970): Sound & Silence. Cambridge University Press - Sundin, B., McPherson, G. and Folkestad, G., ed. (1998) Children composing. Malmö: Malmö Academy of Music, Lunds University - Hamann, Donald L. (ed.) (1991) Creativity in the Music Classroom. Reston: Music Educators National Conference - Thomas, Ronald B., Manhattanvile music curriculum program: Final report. http://eric.ed.gov/?id=ED045865 - Walker, Robert. (1984) Innovation in the Music Classroom: II The Manhattanville Music Curriculum Project. Psychology of Music, Vol. 12, No. 1, 25-33
Work form:	Group lessons, self-study and teaching practice or project work with peer learning.
Assessment	1) Continuous assessment of participation, engagement and attendance of at least 80%. 2) A project in cooperation with your peers; your project can either take place in-class or outside of the conservatoire. You are required to make a video recording for assessment. Assessment criteria (project): • use of appropriate methodological strategies • planning, design and execution of project • leading the project and/or collaborating with your peers (e.g. communication, time management, class management, adaptability)

	• emphatic understanding and engagement with peers Assessment Date (2): The workshops and project presentations will be held around the end of semester 1. The dates will be decided at the beginning of semester 1, in consultation with the students. 3) A reflective report on your project, including a description of the development of your educational skills related to your project. Assessment criteria (report): • level of reflective thinking about your project and about your teaching experiences related to your project. Assessment Date (3): At the end of semester 1. The exact date will be confirmed by the teacher. All assessments will have to be passed in order to pass this course.
Grading System	Pass/Fail
Language	English
Schedule, time, venue:	See ASIMUT schedule
Information:	Julia Stegeman – j.stegeman@koncon.nl Marijke van den Bergen – m.vdbergen@koncon.nl

WORK PLACEMENT

Course title:	**Work Placement**
Osiris course code:	KC-SO-WP
Course content:	As part of professional preparation, you are given an opportunity to do a work placement. You will experience working in a professional organisation. The total amount of hours of the work placement equals at least two weeks. This can be two consecutive weeks, but the hours can also be spread over a longer period. The student, the Conservatoire and the organisation where the internship takes place will determine together how the working hours are divided. In case of an internship of two consecutive weeks, the two periods of the workshop weeks (Oct/Nov and March) are ideally suited for this. In these workshop weeks, also students from other years can choose for an internship. Your placement could be linked to a specific project (production, research, education, software development, etc.) within an organisation or could be part of the day-to-day running of a company. The aim is to apply your knowledge as well as learn new skills. You will receive support and guidance from a mentor at the relevant organisation. The coordinator External Relations & Internships has a list of possible internship organisations. The coordinator is in contact with the professional field in order to keep the list up to date and to expand it. Students can also bring up ideas of possible organisations for internships themselves. This must

	be discussed with the teacher and/or the coordinator External Relations & Internships.
Objectives:	At the end of the course, you: ▪ have experience of working in a professional context ▪ are able to apply your acquired knowledge and skills in a professional context ▪ have increased your knowledge of the industry as well as your network ▪ have gained specific skills related to your individual placement
Programme objectives:	1.B.13, 1.C.1, 1.C.2, 1.C.10, 1.C.11, 1.C.16
Type of course:	Compulsory
Level:	Bachelor III
Duration:	At least two weeks
Prior qualifications/ prerequisites:	Not relevant
Teachers:	Mentor at your work placement and your mentor at Sonology
Credits:	2 ECTS
Literature:	-
Work form:	Depends on the type of placement
Assessment:	During the internship, there is at least one moment of contact between the Conservatoire and the organisation about your progress. Within a month after finishing the work placement, you write a report and hand this in with the mentor of the work placement and the mentor at sonology. The report contains the following subjects: * description of the organisation and the activities * the goal of the internship: why did the student choose this organisation * what were the activities of the student and why is this relevant for their future professional practice * how did the student experience the coaching from the organisation * was the student well-enough prepared, what new knowledge and skills have been acquired. * feedback from the mentor of the organisation and the student's reflection Assessment criteria: ▪ sufficient work experience has been achieved ▪ the report is well written and shows proof of a meaningful dialogue between the student and the organisation ▪ in the report, the students reflect on their progress and understanding of the activities during the internship
Grading system:	Pass/Fail
Language:	English
Schedule, time, venue:	Time and venue dependent on individual placement
Information:	Kees Tazelaar (k.tazelaar@koncon.nl) Head of Institute of Sonology Lucienne de Roos (l.deroos@koncon.nl) coordinator External Relations & Internships

ELECTIVES AND MINORS

For the course descriptions of all electives and minors, please see the **Bachelor Electives & Minors Handbook** on the KC Portal.

APPENDIX 1: ASSESSMENT CRITERIA BACHELOR SONOLOGY

	Composition and/or performance skills	Digital and analogue studio skills	Computer programming and/or hardware skills	Sound projection skills	Ability to discuss techniques and ideas	Originality and relevance of the research	Writing skills
9 - 10	Rare musicianship for this level.	Excellent translation of technical procedures into musical results.	Highly advanced computer programming and/or hardware construction skills.	Exceptional abilities in sound projection of electronic music.	Exceptionally convincing thesis defence.	Exceptional research ability as shown in the thesis.	Exceptional writing ability as shown in the thesis.
7,5 - 8,5	Musicianship skills of a consistently good level.	Good translation of technical procedures into musical results.	Above average computer programming and/or hardware construction skills.	Good abilities in sound projection of electronic music.	Convincing thesis defence.	Good research ability as shown in the thesis.	Good writing ability as shown in the thesis.
5,5 - 7	If not always consistent, a reasonable general level.	Adequate translation of technical procedures into musical results.	Acceptable level of computer programming and/or hardware construction skills.	Adequate abilities in sound projection of electronic music.	Adequate if not always convincing thesis defence.	Adequate research ability as shown in the thesis.	Adequate writing ability as shown in the thesis.
0 - 5	The work and the performance do not reveal sound musicianship skills.	Inadequate translation of technical procedures into musical results.	Computer programming and/or hardware construction skills weak or absent.	Inadequate abilities in sound projection of electronic music.	Inadequate or no response to questions in the thesis defence.	Insufficient amount and/or quality of research as shown in the thesis.	Insufficient amount and/or quality of writing as shown in the thesis.

APPENDIX 2: GRADING SCALES

Royal Conservatoire The Hague

GRADING SCALES

The Royal Conservatoire uses four grading scales for its assessments: Qualifying results - Numeric results - Participation results - Pass/Fail

QUALIFYING RESULTS

Description ENG	Code ENG	Omschrijving NL	Code NL	Pass?	Exemption?
Excellent	EXC	Excellent	EXC	Yes	No
Very good	VG	Zeer goed	ZG	Yes	No
Good	G	Goed	G	Yes	No
More than sufficient	MTS	Ruim voldoende	RV	Yes	No
Sufficient	S	Voldoende	V	Yes	No
Insufficient	I	Onvoldoende	O	No	No
Very insufficient	VI	Zeer onvoldoende	ZO	No	No
Poor	PR	Zwak	Z	No	No
Very poor	VP	Zeer zwak	ZZ	No	No
Extremely poor	EP	Uiterst zwak	UZ	No	No
Exemption	EXEMP	Vrijstelling	VRIJ	Yes	Yes
Pass based on entrance exam	PEN	Behaald op basis van toelatingsexamen	BTO	Yes	Yes
Pass based on Erasmus	PER	Behaald op basis van Erasmus	BER	Yes	Yes
Pass based of preparatory year	PPR	Behaald op basis van voorbereidend jaar	BVO	Yes	Yes
Absent	AB	Niet verschenen	NV	No	No
Extension	EXT	Uitstel	U	No	No

NUMERIC RESULTS

A numeric grade between 0 and 10, including a maximum of one digit after the decimal point.

10 Excellent	9 Very good	8 Good	7 More than sufficient	6 Sufficient	5 Insufficient	4 Very insufficient	3 Poor	2 Very poor	1 Extremely poor

Other possible results are Exemption, Pass based on entrance exam, Absent and Extension.

PARTICIPATION RESULTS

Description ENG	Code ENG	Omschrijving NL	Code NL	Pass?	Exemption?
Participation sufficient	PS	Voldoende deelname	DV	Yes	No
Participation insufficient	PI	Onvoldoende deelname	DNV	No	No
Exemption	EXEMP	Vrijstelling	VRIJ	Yes	Yes
Pass based on entrance exam	PEN	Behaald op basis van toelatingsexamen	BTO	Yes	Yes
Pass based on Erasmus	PER	Behaald op basis van Erasmus	BER	Yes	Yes
Pass based of preparatory year	PPR	Behaald op basis van voorbereidend jaar	BVO	Yes	Yes
Never participated	NP	Nooit deelgenomen	ND	No	No
Extension	EXT	Uitstel	U	No	No

PASS/FAIL

Description ENG	Code ENG	Omschrijving NL	Code NL	Pass?	Exemption?
Pass	P	Pass	P	Yes	No
Fail	F	Fail	F	No	No
Exemption	EXEMP	Vrijstelling	VRIJ	Yes	Yes
Pass based on entrance exam	PEN	Behaald op basis van toelatingsexamen	BTO	Yes	Yes
Pass based on Erasmus	PER	Behaald op basis van Erasmus	BER	Yes	Yes
Pass based of preparatory year	PPR	Behaald op basis van voorbereidend jaar	BVO	Yes	Yes
Absent	AB	Niet verschenen	NV	No	No
Extension	EXT	Uitstel	U	No	No