



**UNIVERSITÀ
DI SIENA
1240**

General Information

Title

Postgraduate Master's Programme (Second-level): **OTOLOGY, LATERAL SKULL BASE SURGERY AND AUDITORY IMPLANTS**

Educational Objectives

This Postgraduate Master's Programme, intended for physicians who have completed a specialisation in Otorhinolaryngology, Audiology and Phoniatrics, or Neurosurgery, is designed to provide advanced knowledge of human anatomy, physiology, pathophysiology, pathology, radiological anatomy and surgical anatomy of the mastoid region, the external, middle and inner ear, and the lateral skull base. The programme includes five teaching sessions, operating-room training with live surgery, and five practical dissection sessions on fresh-frozen specimens, with the aim of enabling participants to acquire theoretical and practical skills in otologic surgery, otoneurosurgery (lateral skull base surgery), and auditory implant surgery (bone-conduction, middle-ear, cochlear and auditory brainstem implants).

The programme is fully funded through the contribution of the Andreotti&Brusone Philanthropy Fund and Fondazione Andreotti Brusone



**ANDREOTTI & BRUSONE
PHILANTHROPY
FUND**



**FONDAZIONE
ANDREOTTI
BRUSONE**

Credits (CFU/ECTS)

60

Total Hours

1500

Programme Duration (months)

12

Application/Enrolment Deadline

1 October 2026

Start Date

November 2026

End Date
October 2027
Maximum Percentage of Permitted Absences
10%
Website
https://masterotnsiena.unisi.it/
Language of Instruction
Italian, English
Department
Department of Medicine, Surgery and Neuroscience (Dipartimento di Scienze Mediche, Chirurgiche e Neuroscienze - DSMCN)
Teaching Contact
Prof. Marco Mandalà - email: mandal@unisi.it Prof. Lorenzo Salerni - email: salerni2@unisi.it

Agreements and Partnerships

Agreements or Partnerships
No agreements or partnerships

Admission Requirements

Class	Description	Degree Type
LM-41	Medicine and Surgery (new university system pursuant to d.m. No. 270/2004)	LM
LS46	Medicine and Surgery	LS
-	Medicine and Surgery	V.O.
Degree class abbreviations - L: Bachelor's Degree; LS: Specialist Degree; LM: Master's Degree; V.O.: Pre-reform Degree; DU: University Diploma		
The qualifications listed above refer to the Italian higher education system. Applicants holding an academic qualification obtained abroad may apply provided that it is deemed comparable, solely for admission purposes, in terms of level, nature, content and academic rights, to the Italian qualification required for admission to the Course.		
Direct Clinical Activities Involving Patients		
No		

Possibility of Carrying Out Practical Activities Using Simulation Mannequins No
Registration with a Professional Register Yes
Professional Register Professional Register of Medical Practitioners
Professional Licence Yes
Type of Professional Licence Medical Practitioner
Specialisation Yes
Type of Specialisation Otorhinolaryngology, Audiology, Neurosurgery
Applicants must also hold the relevant professional licence and be registered with the competent Italian Professional Register.

Application for Admission or Enrolment

Admission/Enrolment Procedure Admission
Documents to be attached Curriculum vitae et studiorum Abstract of the degree thesis Any publications Any other qualifications
Selection Procedure Interview: The interview will focus on the applicant's academic and professional background, knowledge in the field of otoneurosurgery, and motivation
Minimum Number of Enrolments 6

Maximum Number of Places Available

6

Enrolment Fees

Total Amount (€)

0

Note

Donation from the Andreotti&Brusone Philanthropy Fund and Fondazione Andreotti Brusone

Programme Structure

Mode of Delivery

Blended (teaching activities are delivered partly in person and partly online under the guidance of the lecturer)

Venue

University of Siena - San Miniato Science Campus

Subject Area: ANATOMO-PHYSIOLOGY AND RADIOLOGY OF OTOLOGIC AND LATERAL SKULL BASE DISTRICTS

Total Subject Area Credits: 4

Subject Area Coordinators: Aglianò Margherita - Bertelli Eugenio - Mandalà Marco - Salerni Lorenzo

Learning Activity: ANATOMY OF TEMPORAL BONE AND LATERAL SKULL BASE

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: BIO/16 – HUMAN ANATOMY

Learning Activity: ANATOMY OF OUTER, MIDDLE AND INNER EAR

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: BIO/16 - HUMAN ANATOMY

Learning Activity: RADIOLOGICAL ANATOMY OF TEMPORAL BONE AND LATERAL SKULL BASE WITH RADIOLOGICAL CASES

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: BIO/09 - PHYSIOLOGY

Learning Activity: PRINCIPLES OF PHYSIOLOGY OF THE OUTER, MIDDLE AND INNER EAR AND AUDITORY AND VESTIBULAR PATHWAYS

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: BIO/09 - PHYSIOLOGY

Subject Area: PATHOLOGIES AND PRINCIPLES OF MIDDLE AND OUTER EAR SURGERY

Total Subject Area Credits: 6

Subject Area Coordinators: Mandalà Marco - Monciatti Giovanni - Salerni Lorenzo

Learning Activity: TYMPANIC MEMBRANE PERFORATION: DIAGNOSIS AND TREATMENT

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: OTOSCLEROSIS AND OSSICULAR CHAIN DISORDERS. SURGICAL TECHNIQUE AND TIMING OF STAPEDIOPLASTY, STAPEDOTOMY, MALLEOSTAPEDOTOMY AND OSSICULAR CHAIN RECONSTRUCTION

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: MIDDLE EAR EFFUSION: DIAGNOSIS AND TREATMENT. TRANSTYMPANIC DRAINAGE, TRANSTYMPANIC TREATMENTS

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: ACUTE, SUB ACUTE OTITIS MEDIA

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: MALFORMATIVE, NEOPLASTIC AND TRAUMATOLOGIC PATHOLOGY OF THE AURICULAR PAVILION SETTORE SCIENTIFICO DISCIPLINARE MED/31

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: MINIMAL MYRINGOPLASTY, OVERLAY AND UNDERLAY TECHNIQUES MATERIALS FOR MIRINGOPLASTY (AUTOLOGOUS, HETEROLOGOUS)

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Subject Area: PRINCIPLES OF DISSECTION TECHNIQUES, INSTRUMENTATION, AND DISSECTION WORKSTATION-FOCUS ON EAR PINNA AND EXTERNAL AUDITORY CANAL AND MIDDLE EAR

Total Subject Area Credits: 4

Subject Area Coordinators: Mandalà Marco - Monciatti Giovanni - Salerni Lorenzo

Learning Activity: DISSECTION MIRINGOPLASTY- OVERLAY AND UNDERLAY TECHNIQUES

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: DISSECTION – OSSICULAR CHAIN RECONSTRUCTION TECNQUES

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: DISSECTION - OTOPLASTY AND CANALPLASTY TECHNIQUES

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: FRESH FROZEN ANATOMICAL SPECIMEN, THE SURGICAL INSTRUMENTATION FOR DISSECTION, THE OTOMICROSCOPE AND THE IMAGE ACQUISITION SYSTEM

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Subject Area: MIDDLE/MASTOID AND INNER EAR PATHOLOGY AND SURGICAL TREATMENT

Total Subject Area Credits: 4

Subject Area Coordinators: Mandalà Marco - Monciatti Giovanni - Salerni Lorenzo

Learning Activity: SURGERY OF VESTIBULAR DISORDERS (MENIERE'S DISEASE, PERYLIMPHATIC FISTULA, SUPERIOR CANAL DEHISCENCE, BPPV)

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: CHRONIC OTITIS: DIAGNOSIS AND TREATMENT

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: MASTOIDECTOMY AND TIMPANOPLASTY, SURGICAL TECHNIQUE

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: GLOMUS TUMOR AND OTHER RARE DISORDERS OF THE MASTOID BONE

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Subject Area: DISSECTION: FOCUS ON THE MASTOID

Total Subject Area Credits: 4

Subject Area Coordinators: Mandalà Marco - Monciatti Giovanni - Salerni Lorenzo

Learning Activity: DISSECTION – FACIAL NERVE ANASTOMOSIS AND REANIMATION

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: DISSECTION - STUDY OF THE OSSICULAR CHAIN, STUDY OF THE TYMPANIC CAVITY

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: TEMPORAL BONE DISSECTION, MASTOIDECTOMY

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: DISSECTION – FALLOPPIAN CANAL, POSTERIOR LABYRINTH AND ENDOLYMPHATIC SAC
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Subject Area: SURGICAL TREATMENT OF SEVERE AND PROFOUND HEARING IMPAIRMENTS

Total Subject Area Credits: 5

Subject Area Coordinators: Mandalà Marco - Monciatti Giovanni - Salerno Lorenzo

Learning Activity: COCHLEAR IMPLANTS
Credits (CFU/ECTS): 2
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: COUNSELING AND FOLLOW-UP OF THE PATIENT WITH AUDITORY IMPLANTS
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: AUDITORY IMPLANTS INDICATIONS
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: MIDDLE EAR AND BONE ANCHORED AUDITORY IMPLANTS
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Subject Area: DISSEZIONE - DISSECTION – FOCUS ON AUDITORY IMPLANTS

Total Subject Area Credits: 4

Subject Area Coordinators: Mandalà Marco - Monciatti Giovanni - Salerno Lorenzo

Learning Activity: DISSECTION - BONE ANCHORED HEARING IMPLANTS AND MIDDLE EAR IMPLANTS
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: TEMPORAL BONE DISSECTION, ROUND WINDOW ACCESS, COCHLEOTOMY
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: TEMPORAL BONE DISSECTION, COCHLEA EXPOSURE (ANTERIOR LABYRINTH)
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: TEMPORAL BONE DISSECTION, COCHLEAR IMPLANT, SIMULATION ELECTRODE APPLICATION AND IMPLANT ELECTRODE PLACEMENT
Credits (CFU/ECTS): 1
Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Subject Area: LATERAL SKULL BASE PATOLOGY

Total Subject Area Credits: 4

Subject Area Coordinators: Chibbaro Salvatore - Mandalà Marco - Muzii Vitaliano Francesco - Salerno Lorenzo

Learning Activity: TRANSLABYRINTHINE APPROACH - RETRO SIGMOID APPROACH - MIDDLE CRANIAL FOSSA APPROACH, INFRATEMPORAL APPROACH

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/27 - NEUROSURGERY

Learning Activity: ACOUSTIC AND OTHER CRANIAL NERVES SWHANNOMA

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/27 - NEUROSURGERY

Learning Activity: MENINGIOMAS, PETROS APEX MENINGIOMA

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/37 - NEURORADIOLOGY

Learning Activity: FACIAL NERVE TUMOURS

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/26 (NEUROLOGIA)

Subject Area: DISSECTION – FOCUS ON LATERAL SKULL BASE

Total Subject Area Credits: 4

Subject Area Coordinators: Chibbaro Salvatore - Mandalà Marco - Muzii Vitaliano Francesco - Salerno Lorenzo

Learning Activity: DISSECTION – MIDDLE FOSSA AND RETROSYGMOID APPROACHES

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: DISSECTION - INFRATEMPORAL APPROACH

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/27 - NEUROSURGERY

Learning Activity: DISSECTION – TRANSLABYRINTHINE APPROACH

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Learning Activity: DISSECTION – TRANSCANAL AND TRANSCOCHLEAR APPROCHES

Credits (CFU/ECTS): 1

Italian Scientific-Disciplinary Sector - SSD: MED/31 - OTORHINOLARYNGOLOGY

Subject Area: FREE DISSECTION WITH TUTORING - DISSECTION ACTIVITY RECAP**Total Subject Area Credits: 4****Subject Area Coordinators:** Mandalà Marco - Monciatti Giovanni - Salerni Lorenzo*Learning Activity:* FREE DISSECTION WITH TUTORING - RACAP ON LATERAL SKULL BASE*Credits (CFU/ECTS):* 1*Italian Scientific-Disciplinary Sector - SSD:* MED/31 - OTORHINOLARYNGOLOGY*Learning Activity:* FREE DISSECTION WITH TUTORING - RACAP ON AUDITORY IMPLANTS*Credits (CFU/ECTS):* 1*Italian Scientific-Disciplinary Sector - SSD:* MED/31 - OTORHINOLARYNGOLOGY*Learning Activity:* FREE DISSECTION WITH TUTORING - RACAP ON EXTERNAL AND MIDDLE EAR*Credits (CFU/ECTS):* 1*Italian Scientific-Disciplinary Sector - SSD:* MED/31 - OTORHINOLARYNGOLOGY*Learning Activity:* FREE DISSECTION WITH TUTORING - RACAP ON INNER EAR AND MASTOID*Credits (CFU/ECTS):* 1*Italian Scientific-Disciplinary Sector - SSD:* MED/31 - OTORHINOLARYNGOLOGY**Internship/Placement**

Internship

Internship/Placement Activities

Live surgery

Internship/Placement Venue

Azienda Ospedaliero-Universitaria Senese

Credits Awarded for the Internship/Placement

12

Internship/Placement Hours

300

Internship/Placement Completion Date

October 2027

Internship/Placement Supervisors:

Mandalà Marco - Monciatti Giovanni - Salerni Lorenzo

Intermediate Assessment Methods
None
Final Assessment Method
Final thesis or paper; interview aimed at assessing the knowledge acquired
Credits Awarded for the Final Assessment
5

Governing Bodies

Teaching Board
Body composed of all Area Coordinators
Executive Board
No