

Department of OTORHINOLARYNGOLOGY/ ENT

S.No	Name of the Fellowship	Eligibility	Duration	Fee(₹)
01	Fellowship in Otology	MS/DNB ENT	1 yr	1,00,000
02	Fellowship in Rhinology	MS/DNB ENT	1 yr	1,00,000
03	Fellowship in Pediatric Otorhinolaryngology	MS/DNB ENT	1 yr	1,00,000
04	Fellowship in Cochlear Surgery	MS/DNB ENT	1 yr	1,00,000
05	Fellowship in Allergology	MS/DNB ENT	1 yr	1,00,000
06	Fellowship in Laryngology	MS/DNB ENT	1 yr	1,00,000
07	Fellowship in Head & Neck Surgery	MS/DNB ENT, Gen surg	1 yr	1,00,000

Fellowship in Otology

Course Overview

The Fellowship in Otology is a one-year advanced program designed for healthcare professionals who wish to specialize in the diagnosis and management of ear diseases, including hearing loss, balance disorders, and ear surgery. This fellowship provides comprehensive knowledge and hands-on experience in the medical and surgical treatment of otological conditions. The course focuses on enhancing practical skills, knowledge of ear anatomy, patient care, and the latest advancements in otology, including hearing restoration and middle ear surgery.

Prerequisites

Criteria	Details	
Eligibility	MBBS or equivalent degree in medical field (ENT, Audiology, or General Medicine)	
Duration	1 Year	
Mode of Study	Clinical, Theoretical, Hands-on Training	
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project	

Course Objectives

- Master advanced diagnostic techniques in otology, including audiological assessments and imaging.
- Develop proficiency in managing hearing loss, balance disorders, and ear infections.
- Understand the surgical interventions in otology, including cochlear implants and tympanoplasty.
- ➤ Gain expertise in the treatment of pediatric and adult ear conditions.
- Improve patient consultation and communication skills to create individualized treatment plans.
- Engage in research to explore new methodologies in otology and hearing restoration.
- > Stay updated on the latest advancements in ear diseases, treatments, and technologies.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Otology

Module	Topics Covered	
HINTRODUCTION TO LITOLOGY	History and evolution of otology, basic principles, and ethical considerations	
Ear Anatomy and Physiology	Detailed anatomy and function of the outer, middle, and inner ear	
Alidiological Assessments	Techniques in audiometry, tympanometry, and otoacoustic emissions	
Hearing Loss and Its Management	Classification, causes, and management strategies for hearing loss	
Hear Intections and Disorders	Medical treatment and management of otitis media, otitis externa, and other infections	
	Observation and hands-on experience in diagnosis and medical management of ear conditions	

Semester 2: Advanced Otology Techniques and Research

Module	Topics Covered
	Tympanoplasty, mastoidectomy, and cochlear implantation procedures
	Diagnostic techniques for vertigo and management of vestibular disorders
liPediatric Otology	Management of ear diseases in children, including congenital hearing loss
	Indications, fitting, and follow-up care for hearing aids and cochlear implants
_	Endoscopic ear surgery, minimally invasive techniques, and newer technologies
	Literature review, clinical case presentations, and preparation of research dissertation



Program Outcomes

Sr. No.	Program Outcome	Description
1		Master advanced diagnostic techniques in otology, including audiological assessments and imaging
2	Advanced Surgical Skills	Gain proficiency in surgical interventions for hearing loss, balance disorders, and ear infections
3	Hearing Restoration Expertise	Expertise in cochlear implants, hearing aids, and other restoration procedures
4		Ability to diagnose and manage ear conditions in both pediatric and adult populations
5	Patient Care & Consultation Skills	Develop effective communication and consultation skills for personalized treatment plans
6	IL ITOLOGY Research	Contribute to the field of otology through research and new methodologies

Course Outcomes

Sr. No.	Course Outcome	Description	
1	3	Ability to diagnose and manage otological disorders, including hearing loss and balance disorders	
2		Proficiency in performing surgeries such as tympanoplasty, mastoidectomy, and cochlear implantation	
3		Advanced knowledge of hearing aids and cochlear implants for patients with hearing loss	
4		Proficiency in diagnosing and treating ear conditions in pediatric and adult populations	
5	ffective Consultation and reatment Planning Ability to conduct consultations and create tailored treatment plans for ear health		
6		Conduct research that contributes to advancements in otological treatments and technologies	

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination

- ➤ Section A (MCQs 30 Marks)
- ➤ Section B (Short Answer Questions 30 Marks)
- ➤ Section C (Long Answer Questions 40 Marks)

Practical Examination

Component	Details	Marks
	Performing otoscopic examinations and audiological tests	50
	Demonstrating surgical techniques (e.g., tympanoplasty, cochlear implants)	50
Balance Disorders Testing	Conducting vestibular testing for balance disorders	30
OSCE	Simulated clinical scenarios and skills demonstration 4	



Viva Voce (Oral Examination)

Component	Details	Marks
Case Presentations	Discussion on otology treatment cases	50
Advances in Otology	Discussion of recent advancements in otology	20
Ethical & Legal Aspects in Otology	Ethical considerations and patient care	30

Research/Dissertation Submission

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- Diseases of the Ear, Nose and Throat R. A. T. Williams
- ➤ Practical Otology: A Clinical Approach A. G. Jenkins
- Cochlear Implantation: Principles and Practices J. S. Wilson
- ➤ Pediatric Otolaryngology Robert M. Mandel

Journals & E-Resources:

- ➤ Journal of Otology &Neurotology https://journals.lww.com/journalofotology
- ➤ The Laryngoscope https://onlinelibrary.wiley.com/journal/1531496x
- American Academy of Otolaryngology Head and Neck Surgery https://www.entnet.org/
- ➤ British Journal of Audiology https://www.tandfonline.com/toc/ibja20/current

Fellowship in Rhinology

Course Overview

The Fellowship in Rhinology is a one-year advanced program designed for healthcare professionals who wish to specialize in the medical and surgical treatment of nasal and sinus disorders. This fellowship provides comprehensive training in the management of conditions such as chronic rhinosinusitis, nasal polyps, sinonasal tumors, and nasal airway obstruction. The course emphasizes both medical and surgical interventions, including endoscopic sinus surgery (ESS) and advanced diagnostic techniques for nasal and sinus diseases.

Prerequisites

Criteria	Details
IIH ligihility	MBBS or equivalent degree in medical field (ENT, Otolaryngology, or General Medicine)
Duration	1 Year
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- Master the diagnostic tools and techniques for evaluating nasal and sinus conditions.
- Sain expertise in managing chronic rhinosinusitis, nasal polyps, and other sinonasal disorders.
- Learn advanced surgical techniques in endoscopic sinus surgery (ESS), septoplasty, and nasal reconstruction.
- Understand the management of sinonasal tumors, both benign and malignant, and their surgical treatment.
- Develop skills for managing nasal airway obstruction and enhancing nasal breathing.
- Improve patient consultation and communication skills to formulate individualized treatment plans.
- Engage in research to explore new methodologies in rhinology and innovations in sinus surgery.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Rhinology

Module	Topics Covered
Introduction to Rhinology	History, principles, and ethical considerations in rhinology
II	Detailed anatomy and function of the nasal cavity, paranasal sinuses, and their clinical relevance
	Classification, pathophysiology, medical management, and surgical options for rhinosinusitis and nasal polyps
_	Diagnostic imaging (CT, MRI), nasal endoscopy, and functional assessments of nasal airway
II inongegi i iimore	Identification, diagnostic techniques, and management strategies for benign and malignant sinonasal tumors
	Observation and hands-on experience in diagnosing and treating common rhinological conditions

Semester 2: Advanced Rhinological Techniques and Research

Module	Topics Covered
	Techniques, indications, and post-operative care for ESS and other sinus surgeries
IIIN acal Airway Siirgery	Management of nasal septum deviations, turbinate hypertrophy, and techniques in septoplasty and turbinectomy
ININONASAL Reconstruction	Surgical options for nasal reconstruction and advanced nasal techniques
TT.	Surgical and medical management of benign and malignant sinonasal tumors
Rhinoplasty and Cosmetic Surgery	Advanced techniques in functional and aesthetic nasal surgery
3	Literature review, clinical case presentations, and preparation of research dissertation



Program Outcomes

Sr. No.	Program Outcome	Description
1		Master advanced diagnostic techniques, including nasal endoscopy and imaging for nasal and sinus conditions
2	Sinus Surgerv	Gain expertise in performing advanced endoscopic sinus surgeries for rhinosinusitis, nasal polyps, and sinonasal tumors
3	1	Master the surgical management of nasal airway obstruction, including septoplasty and turbinate reduction
4	*	Ability to diagnose and surgically treat benign and malignant sinonasal tumors
5	4500	Develop skills in reconstructive and aesthetic nasal surgery, including rhinoplasty
6	Rhinology Research	Contribute to the field of rhinology through innovative research and new methodologies

Course Outcomes

Sr. No.	Course Outcome	Description
11 1		Ability to diagnose and manage various nasal and sinus conditions, including rhinosinusitis and nasal obstruction
11 /	•	Expertise in performing endoscopic sinus surgery (ESS) and handling complex sinus procedures
11-5		Ability to perform nasal airway surgeries such as septoplasty, turbinate reduction, and nasal reconstruction
11/1		Competence in diagnosing and treating sinonasal tumors through medical and surgical interventions
115	Treatment Planning	Ability to perform thorough consultations and create individualized treatment plans for patients with nasal and sinus disorders
6	1	Conduct high-level research and contribute to advancing knowledge and techniques in rhinology

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination

- ➤ Section A (MCQs 30 Marks)
- ➤ Section B (Short Answer Questions 30 Marks)
- ➤ Section C (Long Answer Questions 40 Marks)

Practical Examination

Component	Details	Marks
Nasal Endoscopy & Imaging	sinus conditions	50
(ESS)	Performing endoscopic sinus surgery for rhinosinusitis and nasal polyps	
Nasal Airway Surgery	Performing septoplasty, turbinate reduction, and other nasal surgeries	30
OSCE	Simulated clinical scenarios and skill demonstration	40



Viva Voce (Oral Examination)

Component	Details	Marks
Case Presentations	Discussion on rhinological treatment cases	50
Advances in Rhinology	Discussion of recent advancements in rhinology	20
Ethical & Legal Aspects in Rhinology	Ethical considerations and patient care in rhinological practices	30

Research/Dissertation Submission

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- ➤ Rhinology: Diseases of the Nose, Sinuses, and Nasopharynx Peter A. Wormald
- Endoscopic Sinus Surgery: Anatomy, Function, and Surgery N. K. S. Batra, M. H. H. Albu
- ➤ Manual of Endoscopic Sinus Surgery A. V. P. V. Rao
- ➤ Nasal and Sinus Disorders: Diagnosis and Management Richard M. Rosenfeld

Journals & E-Resources:

- American Journal of Rhinology & Allergy https://journals.sagepub.com/home/arh
- ➤ International Forum of Allergy & Rhinology https://onlinelibrary.wiley.com/journal/20422021
- ➤ British Journal of Otolaryngology https://www.bjo.com/

Fellowship in Pediatric Otorhinolaryngology

Course Overview

The Fellowship in Pediatric Otorhinolaryngology is a one-year advanced program designed for healthcare professionals who wish to specialize in the diagnosis and treatment of ear, nose, and throat (ENT) disorders in children. This fellowship offers an in-depth understanding of pediatric ENT conditions, focusing on the medical and surgical management of common childhood disorders, including congenital anomalies, airway diseases, hearing loss, and disorders of the nasal and paranasal sinuses. The program emphasizes both clinical knowledge and practical experience with pediatric patients in a multidisciplinary healthcare setting.

Prerequisites

Criteria	Details
IH HOINIHW	MBBS or equivalent degree in medical field (ENT, Pediatrics, or General Medicine)
Duration	1 Year
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- Master the diagnosis and management of common pediatric ENT conditions such as otitis media, tonsillitis, and airway disorders.
- ➤ Gain expertise in the surgical treatment of pediatric conditions, including pediatric ear surgery, adenoidectomy, and tonsillectomy.
- Learn advanced diagnostic techniques for pediatric hearing loss, including audiology tests and imaging.
- Develop proficiency in managing congenital ENT anomalies, including cleft palate, craniofacial anomalies, and choanal atresia.
- ➤ Understand the unique challenges of pediatric airway management and interventions.
- > Improve patient consultation and communication skills when dealing with children and their families.
- Engage in research to contribute to new methodologies in pediatric otorhinolaryngology and enhance pediatric ENT care.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Pediatric Otorhinolaryngology

Module	Topics Covered
Introduction to Pediatric ENT	Overview of pediatric otorhinolaryngology, ethical considerations, and pediatric anatomy
Pediatric Otitis Media and Hearing Loss	Diagnosis, management, and surgical interventions for otitis media and pediatric hearing loss
Pediatric Airway Diseases	Diagnosis and treatment of airway disorders, including laryngomalacia, stridor, and pediatric sleep apnea
Congenital ENT Anomalies	Diagnosis and management of congenital conditions such as cleft palate, choanal atresia, and craniofacial malformations
Pediatric Sinusitis and Rhinosinusitis	Management of pediatric rhinosinusitis, nasal obstruction, and the role of adenoidectomy
Clinical Rotations & Hands-on Training	Observation and hands-on experience in managing pediatric ENT conditions, surgeries, and interventions

Semester 2: Advanced Pediatric ENT Techniques and Research

Module	Topics Covered
	Techniques and indications for pediatric ear surgeries, including tympanoplasty, myringotomy, and grommet insertion
Adenoidectomy and Tonsillectomy	Surgical management of adenoid and tonsil disorders in children
Pediatric Laryngology and Phonosurgery	Advanced management of pediatric voice disorders, laryngomalacia, and congenital laryngeal abnormalities
Pediatric Otology and Audiology	Diagnostic audiological testing, management of hearing loss, and fitting hearing aids in children
Pediatric Facial Trauma and Reconstruction	Management of facial trauma, fractures, and reconstruction in pediatric patients
Research Project & Case Studies	Literature review, clinical case presentations, and preparation of research dissertation

Program Outcomes

Sr. No.	Program Outcome	Description	
1	Expertise in Pediatric ENT Diagnosis	Master the diagnostic techniques for pediatric ear, nose, and throat conditions	
	Surgical Expertise in Pediatric ENT	Gain proficiency in performing pediatric ENT surgeries, including tonsillectomy, adenoidectomy, and ear surgeries	
11 ⊀	Management of Pediatric Hearing Loss	Expertise in managing pediatric hearing loss, including diagnostic tests, audiological interventions, and cochlear implantation	
1/1		Ability to diagnose and treat pediatric airway disorders such as laryngomalacia and obstructive sleep apnea	
5	Proficiency in Pediatric ENT Anomalies	Develop skills in the diagnosis and management of congenital ENT conditions, including cleft palate and craniofacial malformations	
6	Pediatric ENT Research	Conduct research and contribute to advancements in pediatric otorhinolaryngology	

Course Outcomes

Sr. No.	Course Outcome	Description
	Mastery in Pediatric ENT Diagnosis	Ability to diagnose and manage pediatric ENT conditions including otitis media, sinusitis, and airway diseases
<i> </i>	Proficiency in Pediatric ENT Surgeries	Ability to perform pediatric surgeries such as tonsillectomy, adenoidectomy, and ear surgeries
11 -	Expertise in Hearing Loss Management	Proficiency in diagnostic audiology tests, fitting hearing aids, and cochlear implantation in children
	Advanced Knowledge in Pediatric Airway Management	Ability to diagnose and treat pediatric airway conditions, including laryngomalacia and obstructive sleep apnea
5	Competence in Managing Pediatric ENT Anomalies	Skills in diagnosing and treating congenital ENT anomalies like cleft palate and choanal atresia
llh l	Pediatric ENT Research Competence	Ability to contribute to research in pediatric otorhinolaryngology and improve treatment outcomes

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination

- ➤ Section A (MCQs 30 Marks)
- ➤ Section B (Short Answer Questions 30 Marks)
- ➤ Section C (Long Answer Questions 40 Marks)

Practical Examination

Component Details		Marks
	Techniques in ear surgeries (e.g., tympanoplasty, grommet insertion)	50
Adenoidectomy & Tonsillectomy	Performing adenoidectomy and tonsillectomy	50
"Pediatric Airway Procedures	Management of airway disorders, including laryngomalacia	30
OSCE Simulated clinical scenarios and skill demonstration		40

Viva Voce (Oral Examination)

Component	Details	Marks
Case Presentations	Discussion of pediatric ENT treatment cases	50
Advances in Pediatric En i	Discussion of recent advancements in pediatric ENT care	20
11	Ethical considerations and patient care in pediatric ENT practices	30

Research/Dissertation Submission

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Ag <mark>gre</mark> gate Required

Recommended Books & E-Resources

Textbooks:

- Pediatric Otorhinolaryngology J. L. J. Finkelstein
- Pediatric Otolaryngology: A Comprehensive Guide Joseph B. Nadol, M.D.
- Congenital Anomalies of the Ear, Nose, and Throat Bruce H. A. Hartnick
- ➤ Pediatric Airway Surgery S. I. B. Tole
- ➤ Otology, Neurotology, and Skull Base Surgery S. F. Tsue, S. E. Adunka

Journals & E-Resources:



- ➤ International Journal of Pediatric Otorhinolaryngology https://www.journals.elsevier.com/international-journal-of-pediatric-otorhinolaryngology
- ➤ Journal of Pediatric Otolaryngology https://journals.lww.com/otology-neurotology/

Fellowship in Cochlear Surgery

Course Overview

The Fellowship in Cochlear Surgery is a one-year advanced program designed for healthcare professionals who wish to specialize in the surgical management of hearing loss through cochlear implants. This fellowship provides comprehensive training in both the medical and surgical aspects of cochlear implantation, including patient selection, preoperative evaluation, surgical techniques, and postoperative care. The program emphasizes advanced techniques in cochlear implant surgery, audiological management, and rehabilitation, with a strong focus on improving outcomes for patients with severe to profound sensorineural hearing loss.

Prerequisites

Criteria	Details
Eligibility	MBBS or equivalent degree in medical field (ENT, Otolaryngology, Audiology, or General Medicine)
Duration	1 Year
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

- Figure Gain expertise in the diagnostic work-up for cochlear implant candidates, including audiological testing and imaging.
- Master the surgical techniques involved in cochlear implantation, including preoperative planning, intraoperative considerations, and postoperative management.
- Understand the multidisciplinary approach to cochlear implant rehabilitation, including audiological mapping, speech therapy, and patient counseling.
- ➤ Learn advanced techniques in cochlear implantation for adults and children, including complex cases and revision surgeries.
- > Develop skills in managing complications of cochlear implants and troubleshooting device-related issues.
- Engage in research to contribute to the ongoing advancements in cochlear implant technology and surgical techniques.



Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Cochlear Surgery

Module Topics Covered	
	Overview of cochlear implantation, history, indications, and advancements in technology
Audiological Assessment	Audiological evaluation, including pure-tone audiometry, speech audiometry, and auditory brainstem response (ABR)
Preoperative Planning and Imaging	Imaging techniques (CT, MRI) for cochlear implantation, patient selection, and counseling
Basics	Surgical anatomy, patient positioning, cochlear access, and electrode placement techniques
Postoperative Management	Management of wound healing, device activation, and initial mapping
	Observation and hands-on experience in cochlear implantation surgeries and postoperative care

Semester 2: Advanced Cochlear Surgery Techniques and Research

Module	Topics Covered	
	Complex implantation cases, including bilateral implants, sequential implants, and revision surgeries	
Pediatric Cochlear Implantation	Surgical considerations and challenges in pediatric cochlear implantation	
	Techniques for programming the cochlear implant, including advanced mapping strategies and troubleshooting	
1	Multidisciplinary approach to rehabilitation, including speech therapy and auditory training	
11 -	Management of surgical complications, device failure, infection, and long-term follow-up	
Research Project & Case Studies	Literature review, clinical case presentations, and preparation of research dissertation	

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Cochlear Implantation	Master the diagnosis, preoperative evaluation, surgical implantation, and postoperative care for cochlear implant patients
2	Advanced Cochlear Implant Surgery	Gain proficiency in performing cochlear implantation surgeries, including complex and revision cases
3	Proficiency in Cochlear Implant Mapping	Develop expertise in cochlear implant programming, including advanced mapping techniques and troubleshooting
4	Multidisciplinary Cochlear Implant Rehabilitation	Understand the role of speech therapy, audiological rehabilitation, and counseling in cochlear implant outcomes
5	Implant Complications	Develop skills in managing complications such as infections, device failure, and issues related to electrode placement
6	Cochlear Implant Research	Conduct research and contribute to advancements in cochlear implant technology, surgery, and rehabilitation

Course Outcomes

Sr. No.	Course Outcome	Description
	_	Ability to perform cochlear implantation surgeries, including complex and revision procedures
11 /		Ability to perform thorough audiological assessments and implement advanced cochlear implant mapping techniques
	1 -	Ability to collaborate with multidisciplinary teams to optimize cochlear implant outcomes through rehabilitation
4	ii ochigar impiant	Ability to manage common and complex complications associated with cochlear implants
	_	Ability to conduct research and contribute to the field through innovative approaches to cochlear implantation



Sr. No.	Course Outcome	Description
		and rehabilitation

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination

- ➤ Section A (MCQs 30 Marks)
- ➤ Section B (Short Answer Questions 30 Marks)
- ➤ Section C (Long Answer Questions 40 Marks)

Practical Examination

Component	Details	Marks
II -	Performing cochlear implantation surgery in a simulated or real clinical environment	50
<u> </u>	Demonstrating advanced cochlear implant programming and troubleshooting	50



Component	Details	Marks
Pediatric Cochlear Implantation	Performing pediatric cochlear implant surgery, addressing specific challenges	30
OSCE	Simulated clinical scenarios and skill demonstration	40

Viva Voce (Oral Examination)

Component	Details	
ll ace Presentations	Discussion of cochlear implant surgery cases and management strategies	50
	Discussion of technological advancements and surgical techniques	20
	Ethical considerations and patient care in cochlear implantation	30

Research/Dissertation Submission

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimu <mark>m P</mark> assi <mark>ng M</mark> arks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- ➤ Cochlear Implants: Principles and Practices John K. Niparko
- Cochlear Implants: A Handbook Richard H. Gacek, Peter H. Gacek

- Pediatric Cochlear Implantation: Principles and Practices Susan S. Eshraghi, Michael G. Shapiro
- ➤ Manual of Cochlear Implants Charles Limb, Jennifer L. Gifford

Journals & E-Resources:

- ➤ Cochlear Implants International https://www.tandfonline.com/toc/icii20/current
- ➤ Journal of Cochlear Implants https://journals.sagepub.com/home/cji
- ➤ American Cochlear Implant Alliance https://www.cochlearimplant.org/
- ➤ Hearing Research https://www.journals.elsevier.com/hearing-research

Fellowship in Allergology

Course Overview

The Fellowship in Allergology is a comprehensive, one-year program designed for healthcare professionals who seek to specialize in the diagnosis, treatment, and management of allergic conditions. The program focuses on developing expertise in the management of common and complex allergic disorders, including asthma, rhinitis, food allergies, eczema, and immunotherapy. The course combines theoretical knowledge, clinical rotations, and hands-on training to equip fellows with the skills needed to diagnose, treat, and manage patients with allergic diseases effectively.

Prerequisites

Criteria	Details	
III IIMINIIITY	MBBS o <mark>r equ</mark> ivalent degree in medical field (Allergy & Immunology, Respiratory Medicine, Dermatology, or General Medicine)	
Duration	1 Year	
Mode of Study	Clinical, Theoretical, Hands-on Training	
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project	

Course Objectives

- ➤ Develop proficiency in diagnosing allergic diseases using clinical evaluation, laboratory tests, and skin prick tests.
- ➤ Gain expertise in the management of common allergic conditions such as asthma, allergic rhinitis, atopic dermatitis, and food allergies.
- ➤ Master advanced immunotherapy techniques, including allergen-specific immunotherapy (allergy shots) and sublingual immunotherapy (SLIT).
- Learn the latest advances in biologic therapies for allergic conditions.



- > Understand the role of environmental factors and genetics in the development and management of allergies.
- > Enhance patient counseling and education regarding allergic disease management and lifestyle modifications.
- > Engage in research to contribute to the ongoing advancements in allergy diagnosis and therapy.

Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Allergology

Module	Topics Covered		
Hintroduction to Allergology	History, types of allergic diseases, and pathophysiology of allergic reactions		
III III III III II II II II II II II II	Understanding the immune system, IgE-mediated reactions, and the role of T-cells		
III DIAGNOSIS OT A HERGIC I DISEASES	Clinical history, skin tests, serum IgE levels, allergy testing (skin prick test, RAST, etc.)		
Allergic Rhinific and Acthma	Pathophysiology, diagnosis, management (medications, triggers, immunotherapy)		
-	Diagnosis, management, and prevention strategies for atopic dermatitis and food allergies		
	Observation and hands-on experience in allergy testing and patient management		

Semester 2: Advanced Allergology and Research

Module	Topics Covered	
	Pharmacologic management (inhalers, biologics), non- pharmacological therapies, asthma action plans	
II A Heroic Nin Conditions	Management of eczema, urticaria, contact dermatitis, and other allergic skin conditions	
III mmiinofherany in Allergies	Allergen-specific immunotherapy (SCIT), sublingual immunotherapy (SLIT), and new advances	
Biologic Therapies in	Use of monoclonal antibodies (omalizumab, dupilumab) in the	



Module	Topics Covered	
Allergology	management of asthma and other allergic conditions	
	Identification and management of environmental and occupational allergens and risk factors	
Research Project & Case Studies	Literature review, clinical case presentations, and preparation of research dissertation	

Program Outcomes

Sr. No.	Program Outcome	Description	
1	Expertise in Allergic Disease Diagnosis	Master diagnostic techniques for identifying various allergic conditions through clinical history, laboratory tests, and skin tests	
2	Advanced Management of Asthma and Allergies	Gain proficiency in managing asthma, allergic rhinitis, eczema, food allergies, and other allergic conditions	
3	Immunotherapy Expertise	Expertise in administering and managing allergen-specific immunotherapy (SCIT and SLIT) for allergic conditions	
4	Biologic Therapi <mark>es in</mark> Allergology	Understand and implement biologic treatments (omalizumab, dupilumab) for severe allergic diseases	
5	Patient Counseling and Education	Develop effective counseling techniques to educate patients on allergen avoidance, treatment regimens, and lifestyle changes	
6	Contribution to Allergy Research	Engage in research that contributes to advancing knowledge in the field of allergology	

Course Outcomes

Sr. No.	Course Outcome	Description	
11 1		Ability to diagnose allergic diseases through clinical evaluation and diagnostic testing (skin testing, blood tests)	
11/		Proficiency in managing common allergic diseases such as asthma, allergic rhinitis, eczema, and food allergies	



Sr. No.	Course Outcome	Description	
11.5		Ability to deliver allergen-specific immunotherapy (SCIT, SLIT) and biologic therapies for patients with severe allergies	
		Ability to manage difficult and complex allergic conditions, including food allergies, drug allergies, and anaphylaxis	
5	III Omnetence in Recearch	Ability to conduct research in the field of allergology and contribute to advancements in allergy diagnosis and therapy	

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination

- ➤ Section A (MCQs 30 Marks)
- ➤ Section B (Short Answer Questions 30 Marks)
- ➤ Section C (Long Answer Questions 40 Marks)



Practical Examination

Component	Details	
Allergy Testing & Diagnosis	Performing skin prick tests, RAST, and interpreting results	50
Asthma & Rhinitis Management	administration and treatment plans	50
Skin Allergy Management	Diagnosing and managing atopic dermatitis, eczema, and other allergic skin conditions	30
OSCE	Simulated clinical scenarios and skill demonstration	40

Viva Voce (Oral Examination)

Component	Details	
III ase Presentations	Discussion of allergy diagnosis and management strategies	50
IIRecent Advances in Allergology	Discussion of new therapies, including biologics and immunotherapy	20
Ethical & Legal Aspects in Allergology	Ethical considerations in allergy testing and treatment	30

Research/Dissertation Submission

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)



Exam Component	Total Marks	Minimum Passing Marks
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- ➤ Middleton's Allergy: Principles and Practice Reed E. Slade, Stephen T. Holgate
- ➤ Allergy: Principles and Practice Thomas Platts-Mills
- ➤ Immunotherapy of Allergic Diseases S. K. Gupta
- ➤ Pediatric Allergy: Principles and Practice Phil Lieberman, Anna Nowak-Wegrzyn

Journals & E-Resources:

- The Journal of Allergy and Clinical Immunology https://www.jacionline.org/
- ➤ Allergy https://www.allergyjournal.org/
- American Academy of Allergy, Asthma, and Immunology https://www.aaaai.org/

Fellowship in Laryngology

Course Overview

The Fellowship in Laryngology is a one-year advanced program designed for healthcare professionals specializing in the diagnosis, treatment, and management of laryngeal and voice disorders. This fellowship focuses on the comprehensive understanding of laryngeal anatomy, vocal function, and the various medical and surgical interventions used to treat voice, swallowing, and airway disorders. The program combines theoretical education, clinical experience, and hands-on training to ensure the development of skills required to manage a wide variety of laryngeal conditions.

Prerequisites

Criteria	Details
Eligibility	MBBS or equivalent degree in medical field (ENT, Otolaryngology)
Duration	1 Year
Mode of Study	Clinical, Theoretical, Hands-on Training
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project

Course Objectives

➤ Gain expertise in the diagnosis and management of common and complex laryngeal conditions, including voice disorders, laryngopharyngeal reflux, and laryngeal cancers.

- > Understand the detailed anatomy of the larynx, including its functional aspects in voice production and swallowing.
- ➤ Develop proficiency in advanced diagnostic techniques such as laryngoscopy, videostroboscopy, and imaging for laryngeal disorders.
- > Master both medical and surgical approaches to voice disorders, including phonatory rehabilitation and surgical interventions.
- ➤ Learn to treat laryngeal cancers and understand their surgical management, including laryngectomy and reconstructive surgery.
- > Enhance knowledge of laryngological conditions in pediatric and geriatric populations.
- Conduct research to explore new diagnostic and therapeutic methods in laryngology.

Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Laryngology

Module	Topics Covered
Introduction to Laryngology	Overview of laryngeal anatomy, physiology, and common disorders
Voice Disorders and Their Diagnosis	Etiology, diagnosis, and management of voice disorders (hoarseness, dysphonia)
Laryngoscopic Techniques	Basic and advanced laryngoscopy techniques, including flexible and rigid laryngoscopy
Vid <mark>eostroboscopy in</mark> Laryngology	Use of videostroboscopy in assessing vocal cord function and disorders
Laryngeal Infections and Inflammation	Diagnosis and management of infections, laryngitis, and other inflammatory conditions
Clinical Rotations & Hands-on Training	Observation and hands-on experience in diagnosing and treating voice disorders

Semester 2: Advanced Laryngology and Surgical Techniques

Module	Topics Covered
Advanced Laryngeal Surgery	Laryngeal microsurgery, endoscopic approaches, and laser



Module	Topics Covered
	treatments
Laryngeal Cancer Management	Diagnosis, staging, and treatment of laryngeal cancer, including laryngectomy
Phonation Rehabilitation	Voice therapy techniques and rehabilitation methods for voice disorders
Swallowing Disorders and Diagnosis	Diagnosis and management of dysphagia and related disorders
Pediatric and Geriatric Laryngology	Management of laryngeal disorders in pediatric and geriatric populations
Research Project & Case Studies	Literature review, clinical case presentations, and preparation of research dissertation

Program Outcomes

Sr. No.	Program Outcome	Description
1	Diagnosis	Master diagnostic techniques for evaluating laryngeal disorders using laryngoscopy, videostroboscopy, and imaging
2		Gain proficiency in managing voice disorders, including voice therapy and surgical approaches
1		Master laryngeal microsurgery, laser procedures, and surgical management of laryngeal cancers
4	Rehabilitation of Phonation	Develop expertise in phonation rehabilitation for patients with voice disorders
5	Comprehensive Swallowing Disorder Management	Ability to diagnose and treat swallowing disorders, including dysphagia
6		Engage in research projects to advance knowledge and improve therapeutic strategies in laryngology

Course Outcomes



Sr. No.	Course Outcome	Description
1	Mastery in Laryngeal Diagnosis	Ability to diagnose and assess laryngeal disorders using various diagnostic techniques
2	Expertise in Voice Disorder Management	Proficiency in treating voice disorders, both surgically and with therapeutic techniques
3	Proficiency in Laryngeal Surgery	Ability to perform advanced laryngeal surgery, including laryngectomy and reconstructive procedures
4	Competence in Phonation Rehabilitation	Ability to rehabilitate voice function through therapeutic and surgical interventions
5	Expertise in Treating Swallowing Disorders	Ability to diagnose and manage swallowing disorders and perform relevant interventions
6	Ability to Contribute to Laryngology Research	Ability to conduct meaningful research and contribute to clinical practice in laryngology

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern

Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination

- ➤ Section A (MCQs 30 Marks)
- ➤ Section B (Short Answer Questions 30 Marks)
- ➤ Section C (Long Answer Questions 40 Marks)

Practical Examination

Component	Details	Marks
Laryngoscopic Examination	Performing diagnostic laryngoscopy and videostroboscopy	50
Surgical Techniques	Performing laryngeal microsurgery and laser procedures	50
Voice Therapy & Rehabilitation	Assessment and rehabilitation of voice disorders	30
OSCE	Simulated clinical scenarios and skill demonstration	40

Viva Voce (Oral Examination)

Component	Details	Marks
III ace Precentations	Discussion on laryngeal treatment strategies and clinical decision-making	50
	Discussion on new surgical techniques and therapies in laryngology	20
Ethical & Legal Aspects in Laryngology	Ethical considerations in laryngeal treatments and patient care	30

Research/Dissertation Submission

Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)



Exam Component	Total Marks	Minimum Passing Marks
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- Diseases of the Larynx James L. Netterville, Joseph L. Krespi
- Laryngology and Voice Disorders Paul W. Flint
- Essentials of Laryngeal Surgery David W. Eisele
- Surgical Management of Laryngeal Cancer Craig D. Nardini

Journals & E-Resources:

- The Journal of Voice https://www.journals.elsevier.com/the-journal-of-voice
- Laryngoscope https://journals.sagepub.com/home/lar
- American Academy of Otolaryngology Head and Neck Surgery https://www.entnet.org/
- ➤ Otolaryngology-Head and Neck Surgery https://journals.sagepub.com/home/oto

Fellowship in Head & Neck Surgery

Course Overview

The Fellowship in Head & Neck Surgery is a comprehensive one-year advanced training program designed for healthcare professionals who wish to specialize in the management of head and neck diseases. This fellowship focuses on both oncological and reconstructive surgery, providing participants with in-depth training in the surgical treatment of benign and malignant conditions affecting the head and neck region, including the thyroid, parathyroid, salivary glands, larynx, pharynx, and surrounding structures. The program combines theoretical education, clinical experience, and hands-on training in cutting-edge surgical techniques, with a focus on maximizing patient outcomes and quality of life.

Prerequisites

Criteria	Details	
Hiliothility	MBBS or equivalent degree in medical field (ENT, General Surgery, or Oncology)	



Criteria	Details	
Duration	1 Year	
Mode of Study	Clinical, Theoretical, Hands-on Training	
Assessment	Theory, Practical Exams, Clinical Logbook, Research Project	

Course Objectives

- ➤ Gain advanced knowledge and surgical expertise in managing head and neck cancers, including laryngeal, oral cavity, pharyngeal, thyroid, and salivary gland cancers.
- Learn reconstructive techniques following oncological resections to restore both form and function of the head and neck.
- Understand the multidisciplinary approach to managing benign and malignant head and neck disorders, including collaboration with oncologists, radiologists, and speech therapists.
- Master the use of modern imaging and diagnostic tools for the assessment and management of head and neck diseases.
- Enhance skills in minimally invasive and robotic-assisted surgeries for head and neck pathologies.
- > Develop proficiency in the management of complex airways and swallowing disorders following surgery.
- Conduct research to contribute to improving surgical outcomes, patient safety, and quality of life for individuals with head and neck conditions.

Curriculum with Semester-wise Syllabus & Modules

Semester 1: Fundamentals of Head & Neck Surgery

Module	Topics Covered
Introduction to Head & Neck	Overview of head and neck anatomy, surgical approaches, and
Surgery	principles of surgery
Benign Head & Neck Lilmors	Diagnosis and management of benign lesions of the thyroid, salivary glands, and neck masses
	Staging of head and neck cancers, role of imaging (CT, MRI, PET scans) in diagnosis
1	Principles of oncological surgery in head and neck, including resection and reconstruction
Reconstructive Lechniques	Flap-based and free tissue transfer for reconstruction of head and neck defects



Module	Topics Covered
Clinical Rotations & Hands-on	Observation and hands-on experience in performing surgeries
Training	and managing head and neck disorders

Semester 2: Advanced Head & Neck Surgical Techniques and Research

Module	Topics Covered
HAGVanced Surgical Approaches	Advanced techniques in laryngectomy, pharyngectomy, and mandibulectomy
11	Use of robotic surgery for head and neck tumors, minimally invasive approaches
	Managing complex airways in patients with tumors or post- operative conditions
	Surgical treatment of benign and malignant thyroid and parathyroid disorders
III Incological Renabilitation	Post-operative care, rehabilitation, and rehabilitation in patients undergoing head and neck cancer surgery
II -	Literature review, clinical case presentations, and preparation of research dissertation

Program Outcomes

Sr. No.	Program Outcome	Description
1	Expertise in Head & Neck Oncology	Master the diagnosis and surgical treatment of malignant tumors affecting the head and neck, including advanced resection techniques
	Proficiency in Reconstructive Surgery	Gain proficiency in reconstructive techniques, including free flap reconstruction and the use of grafts
	Mastery in Minimally Invasive Techniques	Develop skills in minimally invasive surgery, including robotic-assisted techniques for head and neck conditions
<u> </u>	Advanced Airway Management	Learn to manage complex airways in head and neck surgery, both during and after procedures
5	Post-Operative Care and	Ability to manage post-operative complications and facilitate



Sr. No.	Program Outcome	Description
	Rehabilitation	patient recovery with a multidisciplinary approach
116		Contribute to the development of innovative surgical techniques and patient care protocols in head and neck surgery

Course Outcomes

Sr. No.	Course Outcome	Description
1	Mastery in Oncological Surgery	Ability to perform complex head and neck oncological surgeries, including resections and lymph node dissection
2	-	Proficiency in reconstructing head and neck defects following tumor resection
3		Expertise in robotic-assisted and minimally invasive surgeries for head and neck tumors
4		Ability to manage complex airways, including the use of tracheostomies and airway stents
5	_	Ability to manage post-operative complications, including infection control, wound healing, and pain management
6		Ability to conduct research that contributes to advances in surgical techniques and patient outcomes

Credits & Assessment Methods

Total Credits: 40

Component	Credits
Theory & Lectures	10
Clinical Rotations & Case Studies	10
Hands-on Training & Procedures	10
Research & Dissertation	10

Assessment Pattern



Assessment Type	Weightage
Theory Examination (MCQs, Long & Short Answer)	30%
Clinical & Practical Exam (Case-Based Discussion, OSCE)	30%
Clinical Logbook & Case Reports	20%
Research Presentation & Dissertation	20%

Exam Pattern

Theory Examination

- ➤ Section A (MCQs 30 Marks)
- ➤ Section B (Short Answer Questions 30 Marks)
- ➤ Section C (Long Answer Questions 40 Marks)

Practical Examination

Component	Details	Marks
Surgical Techniques	Performing oncological surgeries (laryngectomy, thyroidectomy)	50
Reconstructive Surgery	Performing head and neck reconstruction (flap surgery)	50
Airway Management	Managing complex airways during surgery and post-operatively	30
OSCE	Simulated clinical scenarios and skill demonstration	40

Viva Voce (Oral Examination)

Component	Details	
Case Presentations	Discussion on head and neck surgical cases and treatment strategies	
Recent Advances in Head & Neck Surgery	Discussion on innovations in head and neck surgical techniques	20
Ethical & Legal Aspects in Surgery	Ethical considerations and patient care in head and neck surgery	30

Research/Dissertation Submission



Component	Marks
Originality & Scientific Merit	30
Methodology & Data Analysis	30
Presentation & Discussion	20
Conclusion & Clinical Relevance	20

Final Weightage & Passing Criteria

Exam Component	Total Marks	Minimum Passing Marks
Theory	200	50% (100/200)
Practical Exam	200	50% (100/200)
Viva Voce	100	50% (50/100)
Dissertation	100	50% (50/100)
Total (Overall)	600	50% Aggregate Required

Recommended Books & E-Resources

Textbooks:

- ➤ Head and Neck Surgery and Oncology Robert B. Jackson, Jatin P. Shah
- ➤ Reconstructive Plastic Surgery of the Head and Neck Bruce M. Spector
- ➤ Thyroid and Parathyroid Diseases James R. Howe
- ➤ Oncologic Surgery of the Head and Neck David W. Eisele

Journals & E-Resources:

- ➤ Journal of Head and Neck Surgery https://journals.lww.com/jhns
- ➤ Head and Neck https://onlinelibrary.wiley.com/journal/10970347
- American Head and Neck Society https://www.ahns.info