

List of Ph.D. Course work subjects that can be offered under
Prosthodontis Group from 2026

Prosthodontis							
Group I		Group II		Group III		Group IV	
Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject	Subject Code	Name of the subject
PHPD101	Osscointegration	PHPD201	Full Arch Implant Restoration	PHPD301	Bone Biology	PHPD401	Dental Implantology
PHPD102	Endodontically Treated Teeth	PHPD202	Endocrowns				

PHPD101 OSSEOINTEGRATION

1. Define osseointegration and explain the process of the same.
2. Factors governing Osseointegration
3. Influence of thread design and surface treatment on enhancing osseointegration
4. Growth and development of the maxilla bone and surrounding stomatognathic structures and their influence on osseointegration
5. Influence of regenerative materials on bone formation and osseointegration

Factors influencing loss of osseointegration

PHPD201 FULL ART IMPLANT SUPPORTED RESTORATIONS

1. Anatomical structures of importance for full arch implant supported restorations in maxillary and mandibular edentulous arches .
2. Prosthodontically driven full large implant supported rehabilitation.
3. Types of restorations in full art implant supported prosthesis.
4. Restorative materials used in full arch implant supported restoration.
5. Importance of number of implants in immediate and conventional loading in full arch.
6. Surgical and restorative complications in full arch implant supported restoration.
7. Use of digital flow in for large implant restorations

PHPD301: BONE BIOLOGY

Alveolar bone histology & Morphology

- Gross histology of bone
- Components of bone
- Structure and Development of alveolar process and its clinical implications

Alveolar Bone physiology

- Bone calcification
- Bone growth
- Bone resorption
- Bone remodelling
- Factors responsible for bone resorption and remodelling
- Bone repair

Biomechanics of bone

- Mechanical properties of natural bone
- Biomechanical properties

Alveolar Bone disorders

- Various Alveolar bone disorders in dentistry

Residual bone resorption and its Prosthodontic management

- Pathology
- Classification
- Pathogenesis
- Epidemiology
- Etiology
- Prevention and treatment

Osseointegration of implants

- History of osseointegration
- Definition
- Stages of osseointegration
- Mechanism of osseointegration
- Factors influencing osseointegration
- Methods to evaluate osseointegration

PHPD401: DENTAL IMPLANTOLOGY

Implant Abutments

- Overview about implant abutments
- classification
- Various implant abutments
- Platform switching

Implant Prosthesis

- Overview of implant prosthesis
- Various implant prosthesis
- Implant impressions

Implant occlusion

- Overview of implant occlusion
- Various implant occlusions
- Difference between natural tooth and implants
- Development of IPO

Implant failures

- Introduction
- Criteria for implant success
- Various implant failures
- Classification
- Management of implant failures