

**Remote Sensing and Geographic Information Systems**  
**School of Engineering and Technology**  
**Asian Institute of Technology, Thailand**  
**Courses to be offered**

| Course Code  | List of Courses/ Semester                                 | Credits       | Course Instructor(s)           | Remarks                |
|--|---|---------------|--------------------------------|------------------------|
| <b>1<sup>st</sup> Semester (August - December)</b>                         |   |               |                                |                        |
| <b>AT76.01</b>   | <b>Geographic Information Systems (GIS)</b>               | <b>3(2-3)</b> | <b>Prof. Nitin K. Tripathi</b> | <b>Required course</b> |
| <b>AT76.03</b>   | <b>Remote Sensing</b>                                     | <b>3(2-3)</b> | <b>Dr. Salvatore Virdis</b>    | <b>Required course</b> |
| AT76.14  | Digital Photogrammetry                                    | 2(1-3)        | Visiting Faculty               | Elective course        |
| AT76.22  | Web GIS Technology  | 2(1-3)        | Dr. Sarawut Ninsawat           | Elective course        |
| AT76.24  | Introduction to Spatial information Engineering           | 1(1-0)        | Dr. Apichon Witayangkurn       | Elective course        |
| AT76.25  | Aerospace Technology                                      | 2(2-0)        | Visiting Faculty               | Elective course        |
| AT76.28  | Principles and Application of InSAR                       | 1(1-0)        | Dr. Salvatore Virdis           | Elective course        |
| AT79.29  | Positioning and Location-Based Services Technology        | 1(1-0)        | Dr. Sarawut Ninsawat           | Elective course        |
| AT76.9029  | Introduction to Global Navigation Satellite Systems       | 1(1-0)        | Dr. Hiroyuki Miyazaki          | Selected Topic         |
| <b>2<sup>nd</sup> Semester (January – May)</b>                             |   |               |                                |                        |
| <b>AT76.01</b>   | <b>Geographic Information Systems (GIS)</b>               | <b>3(2-3)</b> | <b>Prof. Nitin K. Tripathi</b> | <b>Required course</b> |
| <b>AT76.03</b>   | <b>Remote Sensing</b>                                     | <b>3(2-3)</b> | <b>Dr. Salvatore Virdis</b>    | <b>Required course</b> |
| <b>AT76.09</b>   | <b>Digital Image Processing in Remote Sensing</b>         | <b>3(2-3)</b> | <b>Dr. Sarawut Ninsawat</b>    | <b>Required course</b> |
| AT76.15  | Microwave Remote Sensing                                  | 2(2-0)        | Visiting Faculty               | Elective course        |
| AT76.18  | Advance Mapping Techniques                                | 2(2-0)        | Dr. Hiroyuki Miyazaki          | Elective course        |
| AT76.19  | Advance Spatial Analysis Methods                          | 3(2-3)        | Prof. Nitin K. Tripathi        | Elective course        |
| AT76.21  | Data Modeling for Geospatial Information                  | 1(1-0)        | Dr. Hiroyuki Miyazaki          | Elective course        |
| AT76.27  | Geospatial Modelling for Environment                      | 2(1-3)        | Dr. Chitrini Mozumder          | Elective course        |
| AT76.30  | Unmanned Aerial Vehicle Application and Processing        | 1(1-0)        | Dr. Sarawut Ninsawat           | Elective course        |
| AT76.31  | Research Methodology in Geoinformatics                    | 1(1-0)        | Dr. Chitrini Mozumder          | Elective course        |
| AT76.9039  | Spacecraft Dynamics and Control                           | 1(1-0)        | Visiting Faculty               | Selected Topic         |
| <b>Inter Semester (June – July)</b>  |   |               |                                |                        |
| AT76.13  | Remote Sensing Data Analysis                              | 2(1-3)        | Dr. Salvatore G.P. Virdis      | Elective course        |
| AT76.23  | Free and Open Source Software and for Geospatial Analysis | 2(1-3)        | Dr. Sarawut Ninsawat           | Elective course        |
| AT76.26  | Geospatial Data Processing and Management                 | 2(1-3)        | Dr. Apichon Witayangkurn       | Elective course        |
| AT76.20  | GIS Programming and Modeling                              | 3(2-3)        | Prof. Nitin K. Tripathi        | Elective course        |
| <b>3<sup>rd</sup> , 4<sup>th</sup> Semester (August – May)</b>             |   |               |                                |                        |
| AT61.01xx  | Master Thesis   | 1-22          | Instructor                     | Thesis course          |
| AT61.02xx  | Master Research Study                                     | 1-10          | Instructor                     | Research Study         |
| <b>Completed 26 Credits of coursework and 22 credits of Master Thesis</b>  |   |               |                                |                        |
| <b>Completed 38 Credits of coursework and 10 credits of Research Study</b> |   |               |                                |                        |