# NATIONAL INSTITUTE OF TECHNOLOGYDURGAPUR
# DEPARTMENT OF CHEMICAL ENGINEERING
# EVEN SEMESTER CLASS ROUTINE, 2021-22

| Period | Monday | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Semester | 9:00-9:45 | 10:00-10:45 | 11:00-11.45 | 12:00-12.45 | 14.00-14:45 | 15:00-15:45 | 16.00-16:45 | 17:00-17:45 |
| CH 4th | MEC432 | CHC401(TM) | CHC403 (AKS) | CHO441 (RGC) | | | CHS451 (PPG&SP/ KCG&SKL) [Joyeeta, Nabanita, Biswajit] | |
| DDCH 4th | MEC432 | CHC401(TM) | CHC403 (AKS) | CHO441 (RGC) | | | CHS451 (PPG&SP/ KCG&SKL) [Joyeeta, Nabanita, Biswajit] | |
| BT 4th | CHC431(MKM) | | | | | | | |
| DDBT 4th | CHC431(MKM) | | | | | | | |
| CH 6th | | | | | HSC631 | CHE610 (PPG)<br>CHE614 (SKL) | CHC602 (MKM) | CHC603 (BD) |
| DDCH 6th | | | | | HSC631 | CHE610 (PPG)<br>CHE614 (SKL) | CHC602 (MKM) | CHC603 (BD) |
| BT 6th | | | | | | CHC631(JS) | | |
| DDBT 6th | | | | | | CHC631(JS) | | |
| CH 8th | CHO851(AH) | CHE810(SP) | CHE811(AH) | | | | | |
| DDCH 8th | CHO851(AH) | CHE810(SP) | CHE811(AH) | | CH9014(BD)<br>CH9030(RGC) | | | |
| PG-CH | CH2001(GNH) | CH9016(SP) | CH9015(AH) | | CH9014(BD)<br>CH9030(RGC) | | CH2051 (PP/TM/AKS/GNH/SD/JS) [Allotted RS list attached**] | |
| PG-ERSEE | CH2011(SKL) | CH9044(JS)<br>CH9039(AS) | | | CH9032(BD) | | CH2061 (BD/BKM) | |

Sikder 13.01.22

HOD, Chemical Engineering

| Period | Tuesday | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Semester | 9:00-9:45 | 10:00-10:45 | 11:00-11.45 | 12:00-12.45 | 14.00-14:45 | 15:00-15:45 | 16.00-16:45 | 17:00-17:45 |
| CH 4th | CHC401(TM) | CHC403 (AKS) | CHC402(SD) | | | WSS481 | | |
| DDCH 4th | CHC401(TM) | CHC403 (AKS) | CHC402(SD) | | | WSS481 | | |
| BT 4th | CHC431 (MKM) | | | | | CHS481 (JS&SKL/MKM&AH) [Paulami, Rwiddhi, Sayantan Adak] | | |
| DDBT 4th | CHC431 (MKM) | | | | | CHS481 (JS&SKL/MKM&AH) [Paulami, Rwiddhi, Sayantan Adak] | | |
| CH 6th | CHS651 (GNH/SD/RGC/BKM) [Sumona, Sirshendu, Nabanita] | | | | | CHC603(AKS) | CHC601 (KCG) | |
| DDCH 6th | CHS651 (GNH/SD/RGC/BKM) [Sumona, Sirshendu, Nabanita] | | | | | CHC603(AKS) | CHC601 (KCG) | |
| BT 6th | | | | | | | | |
| DDBT 6th | | | | | | | | |
| CH 8th | | | | CHE811(AH) | | | | CHO841(BKM) |
| DDCH 8th | | | | CHE811(AH) | CH9014(BD)<br>CH9030(RGC) | | | CHO841(BKM) |
| PG-CH | CH9042(PP) | CH9042(PP)<br>CH9011(BKM) | CH2001(GNH) | CH9015(AH) | CH9014(BD)<br>CH9030(RGC) | CH2002(SP) | | |
| PG-ERSEE | CH9042(PP) | CH9042(PP)<br>CH9045(BKM) | CH2011(SKL) | | CH9032(BD) | | CH9039(AS) | |

13.01.22

HOD, Chemical Engineering

| Period | Wednesday | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Semester | 9:00-9:45 | 10:00-10:45 | 11:00-11.45 | 12:00-12.45 | 14.00-14:45 | 15:00-15:45 | 16.00-16:45 | 17:00-17:45 |
| CH 4th | MEC432 | CHC403 (AKS) | CHC402(SD) | CHO441 (RGC) | | | CHS452 (AS) [Ravindra, Bhaskar] | |
| DDCH 4th | MEC432 | CHC403 (AKS) | CHC402(SD) | CHO441 (RGC) | | | CHS452 (AS) [Ravindra, Bhaskar] | |
| BT 4th | CHC431(MKM) | | | | | | | |
| DDBT 4th | CHC431(MKM) | | | | | | | |
| CH 6th | CHS652 (TM/BD) [Arunava, Sirshendu, Saheli] | | | | HSC631 | CHC602 (PP) | CHC602 (PP) | CHC601 (KCG) |
| DDCH 6th | CHS652 (TM/BD) [Arunava, Sirshendu, Saheli] | | | | HSC631 | CHC602 (PP) | CHC602 (PP) | CHC601 (KCG) |
| BT 6th | | | | | | CHC631(JS) | | |
| DDBT 6th | | | | | | CHC631(JS) | | |
| CH 8th | CHO851(AH) | | | | | | | |
| DDCH 8th | CHO851(AH) | | | | | | | |
| PG-CH | CH2001(PPG) | CH9042(PP)<br>CH9011(BKM) | | | | | | CH2002(TM) |
| PG-ERSEE | CH2011(SKL) | CH9042(PP)<br>CH9045(BKM) | CH9031(GNH)<br>CH9040(AS) | CH9044(JS) | | | | |

Sikder
13.01.22
HOD, Chemical Engineering

| Period | Thursday | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Semester | 9:00-9:45 | 10:00-10:45 | 11:00-11.45 | 12:00-12.45 | 14.00-14:45 | 15:00-15:45 | 16.00-16:45 | 17:00-17:45 |
| CH 4th | CHC401(TM) | CHC402(SD) | CHC402(SD) | | | | | |
| DDCH 4th | CHC401(TM) | CHC402(SD) | CHC402(SD) | | | | | |
| BT 4th | CHC431(MKM) | | | | | | | |
| DDBT 4th | CHC431(MKM) | | | | | | | |
| CH 6th | CHS653 (PP/AKS/MKM/AH) [Rwiddhi, Paulami, Sumona, Sayantan Adak] | | | | | CHE610 (PPG)<br>CHE614 (SKL) | CHC601 (KCG) | CHC602 (MKM) |
| DDCH 6th | CHS653 (PP/AKS/ MKM/AH) [Rwiddhi, Paulami, Sumona, Sayantan Adak] | | | | | CHE610 (PPG)<br>CHE614 (SKL) | CHC601 (KCG) | CHC602 (MKM) |
| BT 6th | | | | | | | | |
| DDBT 6th | | | | | | | | |
| CH 8th | CHE810(SP) | | CHE811(AH) | | | | | CHO841(BKM) |
| DDCH 8th | CHE810(SP) | | CHE811(AH) | | CH9014(BD)<br>CH9030(RGC) | | | CHO841(BKM) |
| PG-CH | CH9016(SP) | CH2001(GNH) | CH9015(AH) | | CH9014(BD)<br>CH9030(RGC) | CH2002(SP) | | |
| PG-ERSEE | CH9031(BD)<br>CH9040(AS) | CH2011(SKL) | CH9044(JS)<br>CH9039(AS) | | CH9032(BD) | | | |

S Kder 13.01.22

HOD, Chemical Engineering

| Period | Friday | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Semester | 9:00-9:45 | 10:00-10:45 | 11:00-11.45 | 12:00-12.45 | 14.00-14:45 | 15:00-15:45 | 16.00-16:45 | 17:00-17:45 |
| CH 4th | MEC432 | CHC401(TM) | CHC403 (AKS) | CHO441 (RGC) | | | | |
| DDCH 4th | MEC432 | CHC401(TM) | CHC403 (AKS) | CHO441 (RGC) | | | | |
| BT 4th | | | | | | | | |
| DDBT 4th | | | | | | | | |
| CH 6th | | | | | HSC631 | CHE610 (PPG)<br>CHE614 (SKL) | CHC601 (KCG) | CHC603 (BD) |
| DDCH 6th | | | | | HSC631 | CHE610 (PPG)<br>CHE614 (SKL) | CHC601 (KCG) | CHC603 (BD) |
| BT 6th | | | | | | CHC631(JS) | | |
| DDBT 6th | | | | | | CHC631(JS) | | |
| CH 8th | CHO851(AH) | CHE810(SP) | | | | | | CHO841(BKM) |
| DDCH 8th | CHO851(AH) | CHE810(SP) | | | | | | CHO841(BKM) |
| PG-CH | | CH9016(SP) | CH9011(BKM) | | | | | CH2002(TM) |
| PG-ERSEE | | CH9031(GNH)<br>CH9040(AS) | CH9045(BKM) | | | | | |

13.01.22

HOD, Chemical Engineering

## List of Subjects and Faculty Assigned

| Subject | Course Code | Faculty Assigned | Abbreviation of Faculty Name |
|---|---|---|---|
| **UG 4th Semester** | | | |
| Heat Transfer | CHC401 | Prof. Tamal Mandal | TM |
| Mechanical Operation | CHC402 | Prof. Susmita Dutta | SD |
| Mass Transfer- I | CHC403 | Prof. Anup Kumar Sadhukhan | AKS |
| Open Elective - I : Process Heat Transfer | CHO441 | Dr. Rajib Ghosh Chaudhuri | RGC |
| Unit Operation of Chemical Engineering- I | CHC431 | Dr. Mrinal Kanti Mandal | MKM |
| Fluid and Thermal Engineering | MEC431 | | |
| Fluid Mechanics Laboratory | CHS451 | Prof. Parthapratim Gupta<br>Dr. Swapan Paruya<br>Prof. Kartik Chandra Ghanta<br>Dr. Sandip Kumar Lahiri | PPG<br>SP<br>KCG<br>SKL |
| Process Equipment Design- I | CHS452 | Dr. Ananta Sarkar | AS |
| Unit Operations of Chemical Engineering-I | CHS481 | Dr. Jaya Sikder<br>Dr. Sandip Kumar Lahiri<br>Dr. Mrinal Kanti Mandal<br>Dr. Abhiram Hens | JS<br>SKL<br>MKM<br>AH |
| Workshop Practice- II | WSS481 | | |
| | | | |
| **UG 6th Semester** | | | |

| | | | |
|---|---|---|---|
| Transport Phenomena | CHC601 | Prof. Kartik Chandra Ghanta | KCG |
| Petroleum Refining and Petrochemicals | CHC602 | Prof. Parimal Pal<br>Dr. Mrinal Kanti Mandal | PP<br>MKM |
| Process Modelling and Simulation | CHC603 | Prof. Anup Kumar Sadhukhan<br>Dr. Bimal Das | AKS<br>BD |
| Depth Elective 1 :Chemical Reactor Analysis | CHE610 | Prof. Parthapratim Gupta | PPG |
| Depth Elective 1 :Artificial Intelligence in Chemical Industries | CHE614 | Dr. Sandip Kumar Lahiri | SKL |
| Process Control and Instrumentation | CHC631 | Dr. Jaya Sikder | JS |
| Economics and Management Accountancy | HSC631 | | |
| Fuel Laboratory | CHS651 | Prof. Gopinath Halder<br>Prof. Susmita Dutta<br>Dr. Rajib Ghosh Chaudhuri<br>Dr. Bikash Kumar Mondal | GNH<br>SD<br>RGC<br>BKM |
| Reaction Engineering Laboratory | CHS652 | Prof. Tamal Mandal<br>Dr. Bimal Das | TM<br>BD |
| Mass Transfer Laboratory (Steam required from ME Dept; consecutive 4 days in one group) | CHS653 | Prof. Parimal Pal<br>Prof. Anup Kumar Sadhukhan<br>Dr. Mrinal Kanti Mandal<br>Dr. Abhiram Hens | PP<br>AKS<br>MKM<br>AH |
| | | | |
| **UG 8th Semester** | | | |
| Depth Elective-V: Multiphase Flow | CHE810 | Dr. Swapan Paruya | SP |
| Depth Elective-V: Analysis of Optimization | CHE811 | Dr. Abhiram Hens | AH |

| | | | |
|---|---|---|---|
| Open Elective -IV: Bioengineering & Industrial applications | CHO841 | Dr. Bikash Kumar Mondal | BKM |
| Open Elective -V: Energy, Environment & Sustainability | CHO851 | Dr. Abhiram Hens | AH |
| | | | |
| M.Tech (CH) 2nd Semester | | | |
| Advanced Chemical Engineering Thermodynamics | CH2001 | Prof. Parthapratim Gupta<br>Prof. Gopinath Halder | PPG<br>GNH |
| Advanced Transport Phenomena | CH2002 | Prof. Tamal Mandal<br>Dr. Swapan Paruya | TM<br>SP |
| Elective-III : Non-conventional Energy Engineering | CH9014 | Dr. Bimal Das | BD |
| Elective-III: Colloids and Interface Engineering | CH9030 | Dr. Rajib Ghosh Chaudhuri | RGC |
| Elective-IV: Membrane Technology in Environmental Pollution Control | CH9042 | Prof. Parimal Pal | PP |
| Elective-IV: Biochemical and Bio-Engineering | CH 9011 | Dr. Bikash Kumar Mondal | BKM |
| Elective-V : Multiphase Flow | CH9016 | Dr. Swapan Paruya | SP |
| Elective-V: Chemical Process Optimization | CH9015 | Dr. Abhiram Hens | AH |
| Advanced Chemical Engineering Laboratory-2 | CH 2051 | Prof. Parimal Pal<br>Prof. Tamal Mandal<br>Prof. Anup Kumar Sadhukhan<br>Prof. Gopinath Halder<br>Prof. Susmita Dutta<br>Dr. Jaya Sikder | PP<br>TM<br>AKS<br>GNH<br>SD<br>JS |
| | | | |
| M.Tech (ERSE) 2nd Semester | | | |

| | | | |
|---|---|---|---|
| Process Control | CH 2011 | Dr. Sandip Kumar Lahiri | SKL |
| Elective-III: Atmospheric Emission Control in Combustion Systems | CH 9039 | Dr. Ananta Sarkar | AS |
| Elective-III : Air Pollution Control and Solid Waste Management | CH 9044 | Dr. Jaya Sikder | JS |
| Elective-IV: Membrane Technology in Environmental Pollution Control | CH 9042 | Prof. Parimal Pal | PP |
| Elective-IV: Chemical and Biochemical Reaction Engineering | CH 9045 | Dr. Bikash Kumar Mondal | BKM |
| Elective-V: Waste Valorization | CH 9031 | Prof. Gopinath Halder<br>Dr. Bimal Das | GNH<br>BD |
| Elective-V: Fuel Cell and Battery | CH 9040 | Dr. Ananta Sarkar | AS |
| Elective-VI: Conventional and Non-Conventional Energy Engineering | CH 9032 | Dr. Bimal Das | BD |
| Conventional and Non-Conventional Energy Laboratory | CH 2061 | Dr. Bimal Das<br>Dr. Bikash Kumar Mondal | BD<br>BKM |
| | | | |

# Research Scholar Allotment to Laboratory

| Sl. No. | Laboratory Name | Faculty Name | Name of Research Scholars |
|---|---|---|---|
| 1 | Fluid Mechanics Laboratory (CHS451) | (PPG & SP)(KCG & SKL) | Joyeeta Bose,<br>Nabanita Ghosh,<br>Biswajit Sarkar |
| 2 | Process Equipment Design- I (CHS452) | AS | Ravindra Kumar, Bhaskar Bishayee |
| 3 | Unit Operations of Chemical Engineering-I Laboratory (CHS481) | (JS & SKL)(MKM & AH) | Paulami Banerjee,<br>Rwiddhi Sarkhel,<br>Sayantan Adak. |
| | | | |
| 4 | Fuel Laboratory (CHS651) | GNH, SD, RGC, BKM | Sumona Show,<br>Sirshendu Banerjee,<br>Nabanita Ghosh. |
| 5 | Reaction Engineering Laboratory (CHS652) | TM, BD | Arunava Chatterjee,<br>Sirshendu Banerjee, Saheli Kar. |
| 6 | Mass Transfer Laboratory (CHS653) | PP, AKS, MKM, AH | Rwiddhi Sarkhel, Paulami Banerjee,<br>Sumona Show, Sayantan Adak. |
| 7 | **Advanced Chemical Engineering Lab-2 (CH2051) | | |
| | i. Determination of total organic and inorganic carbon using TOC analyser | SD | Arnab Sahu, Bulti Kandar |
| | ii. Determination of heavy metal from wastewater using Atomic absorption Spectrometer | SD | Biswajit Sarkar, Sayantan Sarkar. |
| | iii. Estimation of anion from wastewater using ion chromatography | SD | Bulti Kandar, Arnab Sahu |
| | iv. Detection/prediction of presence of functional group/s in a sample by UV spectroscopy | GNH | Indradev Kumar, Bhaskar Bishayee |
| | v. Detection/prediction of presence of functional group/s in a sample by fluorescence spectroscopy | TM | Arunava Chatterjee, Indradev Kumar |
| | vi. Detection of components with quantification by HPLC | PP | Meenakshi, Saheli Kar |
| | vii. Detection of components with quantification by GC-MS | JS | Sayantan Sarkar, Joyeeta Bose |
| | viii. Thermal stability analysis of solid sample using TGA | AKS | Ravindra Kumar, Meenakshi. |