

COURSE STRUCTURE (GR17)
B. Tech. Mining Engineering

I Year

I Semester

| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------|---------------------------------------|---------------|------------------|---|-----|----|-------------------------------------|------|-------|
| | | | L | T | P/D | | Int. | Ext. | Total |
| 1 | English – I | 17198101 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 2 | Mathematics - I | 17198102 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 3 | Computer Programming | 17195103 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 4 | Engineering Physics | 17198104 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 5 | Environmental Studies | 17198105 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 6 | Engineering Drawing | 17193176 | 1 | - | 3 | 3 | 40 | 60 | 100 |
| 7 | English Communication Skills Lab. - I | 17198111 | - | - | 3 | 2 | 50 | 50 | 100 |
| 8 | Engineering Physics Lab. | 17198112 | - | - | 3 | 2 | 50 | 50 | 100 |
| 9 | Computer Programming Lab. | 17195113 | - | - | 3 | 2 | 50 | 50 | 100 |
| Total | | | 16 | 5 | 12 | 24 | 390 | 510 | 900 |

L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

(Signature)
BOS (MINING) Chairman
(Dr.K Srihari)

(Signature)
University Nominee
(Prof.B. Suryannarayana Sastry)

(Signature)
Subject Expert
(Dr.S.Jayanthu)

(Signature)
Industrial Representative
(Shri Bala Surendra nath P)

(Signature)
BOS Member
(Shri . B. B. Prakash)

(Signature)
BOS Member
(Shri Ramesh Kant)

COURSE STRUCTURE (GR17)
B. Tech. Mining Engineering

I Year

II Semester

| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------|---------------------------------------|---------------|------------------|---|---|----|-------------------------------------|------|-------|
| | | | L | T | P | | Int. | Ext. | Total |
| 1. | English – II | 17198201 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 2. | Mathematics – II | 17198202 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 3. | Mathematics – III | 17198203 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 4. | Engineering Chemistry | 17198204 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 5. | Engineering Mechanics | 17193205 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 6. | Professional Ethics and Human Values | 17198206 | 2 | 1 | | 1 | 40 | 60 | 100 |
| 7. | English Communication Skill Lab. - II | 17198211 | - | - | 3 | 2 | 50 | 50 | 100 |
| 8. | Engineering Chemistry Lab. | 17198212 | - | - | 3 | 2 | 50 | 50 | 100 |
| 9. | Engineering Workshop & IT Workshop | 17198283 | - | - | 3 | 2 | 50 | 50 | 100 |
| Total | | | 17 | 6 | 9 | 22 | 390 | 510 | 900 |

L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. – External

19/06/17
BOS (MINING) Chairman
(Dr.K Srihari)

45/17
University Nominee
(Prof.B. Suryannarayana Sastry)

24.6.17.
Subject Expert
(Dr.S.Jayanthu)

P. Bala Surendra nath
Industrial Representative
(Shri Bala Surendra nath P)

24/6/17
BOS Member
(Shri . B. B. Prakash)

Kant
BOS Member
(Shri Ramesh Kant)

COURSE STRUCTURE (GR17)
B. Tech. Mining Engineering

II Year

I Semester

| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------|--|---------------|------------------|---|-----|----|--|------|-------|
| | | | L | T | P/D | | Int. | Ext. | Total |
| 1. | Fluid Mechanics & Hydraulic Machinery ✓ | 17160301 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 2. | Mine Surveying ✓ ✓ | 17160302 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 3. | Introductory Geology | 17160303 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 4. | Dev. Of Mineral Deposits ✓ | 17160304 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 5. | Drilling & Blasting ✓ | 17160305 | 3 | 1 | | 3 | 40 | 60 | 100 |
| 6. | CAD for Mining ✓ ✓ | 17160376 | 1 | - | 3 | 3 | 40 | 60 | 100 |
| 7. | Soft Skills - I ✓ | 17169307 | 1 | 2 | - | 1 | 40 | 60 | 100 |
| 8. | Fluid Mechanics & Hydraulic Machinery Lab. ✓ | 17160311 | - | - | 3 | 2 | 50 | 50 | 100 |
| 9. | Mine Surveying Lab. ✓ | 17160312 | - | - | 3 | 2 | 50 | 50 | 100 |
| Total | | | 17 | 7 | 9 | 23 | 380 | 520 | 900 |

L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

Scy
BOS (MINING) Chairman
(Dr.K Srihari)

Scy
University Nominee
(Prof.B. Suryannarayana Sastry)

Dr. S. Jayanthu
24.6.17
Subject Expert
(Dr.S.Jayanthu)

P. Bala Surendra nath
Industrial Representative
(Shri Bala Surendra nath P)

Prakash
24/6/17
BOS Member
(Shri . B. B. Prakash)

Kant
BOS Member
(Shri Ramesh Kant)

COURSE STRUCTURE (GR17)
B. Tech. Mining Engineering

II Year

II Semester

| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------|---|---------------|------------------|---|---|----|-------------------------------------|------|-------|
| | | | L | T | P | | Int. | Ext. | Total |
| 1. | Basic Mechanical Engineering for Mining | 17163401 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 2. | Basic Electrical & Electronics Engineering | 17162402 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 3. | Advanced Mine Surveying | 17160403 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 4. | Surface Mining | 17160404 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 5. | Underground Coal Mining | 17160405 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 6. | Engineering Geology | 17160406 | 3 | 1 | - | 3 | 40 | 60 | 100 |
| 7. | Basic Electrical & Electronics Engineering Lab. | 17162411 | - | - | 3 | 2 | 50 | 50 | 100 |
| 8. | Mining Geology Lab. | 17160412 | - | - | 3 | 2 | 50 | 50 | 100 |
| Total | | | 18 | 6 | 6 | 22 | 340 | 460 | 800 |

L - Lecture T- Tutorial P - Practical C- Credits Int. - Internal Ext. - External

(Signature)
BOS (MINING) Chairman
(Dr.K Srihari)

(Signature)
University Nominee
(Prof.B. Suryannarayana Sastry)

(Signature)
Subject Expert
(Dr.S.Jayanthu)

(Signature)
Industrial Representative
(Shri Bala Surendra nath P)

(Signature)
BOS Member
(Shri . B. B. Prakash)

(Signature)
BOS Member
(Shri Ramesh Kant)

COURSE STRUCTURE (GR17)


B. Tech. Mining Engineering

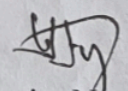
III Year

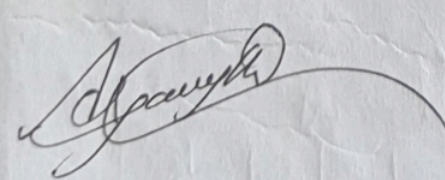
I Semester

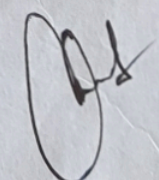
| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------|-----------------------------------|---------------|------------------|---|-----|----|-------------------------------------|------|-------|
| | | | L | T | P/D | | Int. | Ext. | Total |
| 1 | Mine Systems Engineering ✓ | 17169501 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 2 | Industrial Engineering Management | 17169502 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 3 | Underground Metal Mining ✓ | 17160503 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 4 | Mine Ventilation ✓ | 17160504 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 5 | Mine planning and design | 17160505 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 6 | RS & GIS applications | 17160506 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 7 | Soft Skills - II ✓ | 17169507 | 1 | 0 | 0 | 1 | 40 | 60 | 100 |
| 8 | Mine Ventilation Lab. | 17160511 | 0 | 1 | 2 | 2 | 50 | 50 | 100 |
| 9 | Mine planning and design Lab. | 17160512 | 0 | 1 | 2 | 2 | 50 | 50 | 100 |
| 10 | Technical Seminar | 17160521 | 0 | 1 | 2 | 2 | 100 | - | 100 |
| Total | | | 13 | 9 | 6 | 25 | 480 | 520 | 1000 |

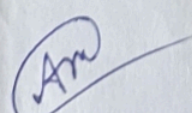
L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

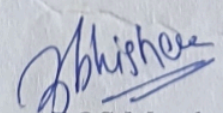

BOS (MINING) Chairman
(Dr. K. Srihari)


University Nominee
(Dr. B. Suryannarayana Sastry)


Subject Expert
(Dr. S. Jayanthu)


Industrial Expert
(Shri. J. Charan Sainath)


BOS Member
(Shri. A. Sandeep Kumar)


BOS Member
(Dr. A.K. Tripathi)


BOS Member
(Shri. P. Taviti Naidu)

COURSE STRUCTURE (GR17)

B. Tech. Mining Engineering

III Year

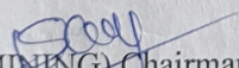
II Semester

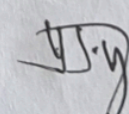
| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------|-------------------------------|---------------|------------------|---|-----|----|-------------------------------------|------|-------|
| | | | L | T | P/D | | Int. | Ext. | Total |
| 1 | Rock Mechanics | 17160601 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 2 | Mineral Processing | 17160602 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 3 | Mine Strata Control | 17160603 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 4 | Mining Machinery | 17160604 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 5 | Mine Construction Engineering | 17160605 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 6 | Open Elective | 17160666 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 7 | Rock Mechanics Lab | 17160611 | 0 | 1 | 2 | 2 | 50 | 50 | 100 |
| 8 | Mineral Processing Laboratory | 17160612 | 0 | 1 | 2 | 2 | 50 | 50 | 100 |
| Total | | | 12 | 8 | 4 | 22 | 340 | 460 | 800 |

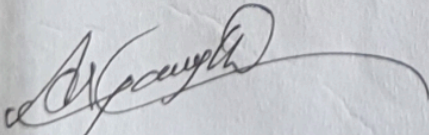
L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

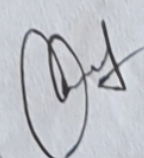
Open Electives:

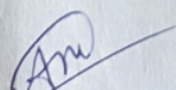
- Total Station & GPS Surveying (17160666 a)
- Industrial Hydraulics and Pneumatics (17160666 b)
- Social Network Analysis (17160666 c)
- Internet of Things (17160666 d)
- Renewable energy resources (17160666 e) ✓
- Hybrid Vehicles (17160666 f)
- Principles of Management (17160666 g)

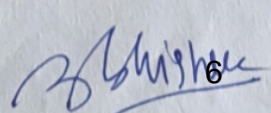

BOS (MINING) Chairman
(Dr. K. Srihari)

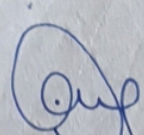

University Nominee
(Dr. B. Suryannarayana Sastry)


Subject Expert
(Dr. S. Jayanthu)


Industrial Expert
(Shri. J. Charan Sainath)


BOS Member
(Shri. A. Sandeep Kumar)


BOS Member
(Dr. A.K. Tripathi)


BOS Member
(Shri. P. Taviti Naidu)

COURSE STRUCTURE (GR17)

B.Tech. Mining Engineering

IV Year

I Semester

| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------------|----------------------------------|---------------|------------------|----------|----------|-----------|--|------------|-------------|
| | | | L | T | P/D | | Int. | Ext. | Total |
| 1 | Mine Legislation | 17160701 | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 2 | Mine hazards & Rescue | 17160702 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 3 | Advanced Mining Machinery | 17160703 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 4 | Mineral Economics | 17160704 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 5 | IPR & Patents | 17169705 | 1 | 0 | 0 | 1 | 40 | 60 | 100 |
| 6 | Elective- I | 17160761 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 7 | Elective- II | 17160762 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 8 | Mining Machinery Laboratory | 17160711 | 0 | 1 | 2 | 2 | 50 | 50 | 100 |
| 9 | Mine hazards & Rescue Laboratory | 17160712 | 0 | 1 | 2 | 2 | 50 | 50 | 100 |
| 10 | Minor Project | 17160721 | 0 | 0 | 2 | 1 | 100 | - | 100 |
| Total | | | 13 | 8 | 6 | 24 | 480 | 520 | 1000 |

L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

Elective – I


- a) Environmental Impact Assessment in Mines (17160761 a)
- b) Disaster Management (17160761 b)
- c) Rock Slope Engineering (17160761 c)
- d) Mine safety and health engineering (17160761 d)

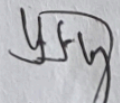
17160765 a


Elective – II

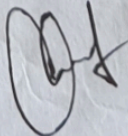
- a) Geo Statistics (17160762 a)
- b) Rock Fragmentation Engineering (17160762 b)
- c) Deep Sea Mining (17160762 c)
- d) Tunneling Engineering (17160762 d)

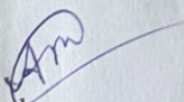
17160766 b

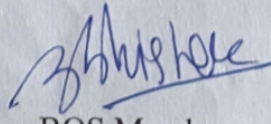

BOS (MINING) Chairman
(Dr. K. Srihari)

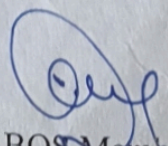

University Nominee
(Dr. B. Suryannarayana Sastry)


Subject Expert
(Dr. S. Jayanthu)


Industrial Expert
(Shri. J. Charan Sainath)


BOS Member
(Shri. A. Sandeep Kumar)


BOS Member
(Dr. A.K. Tripathi)


BOS Member
(Shri. P. Taviti Naidu)

COURSE STRUCTURE (GR17)
B. Tech. Mining Engineering

IV Year

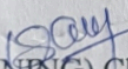
II Semester

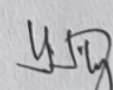
| S. No. | Subject Title | Subject Codes | Periods per week | | | C | Scheme of Examination Maximum Marks | | |
|--------|--|---------------|------------------|---|-----|----|-------------------------------------|------|-------|
| | | | L | T | P/D | | Int. | Ext. | Total |
| 1 | Environmental Pollution & Control in Mines | 17160801 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 2 | Computer Applications in Mining | 17160802 | 3 | 0 | 0 | 3 | 40 | 60 | 100 |
| 3 | Elective- III | 17160861 | 2 | 1 | 0 | 3 | 40 | 60 | 100 |
| 4 | Project | 17160841 | 0 | 3 | 12 | 9 | 100 | 100 | 200 |
| Total | | | 7 | 5 | 12 | 18 | 220 | 280 | 500 |

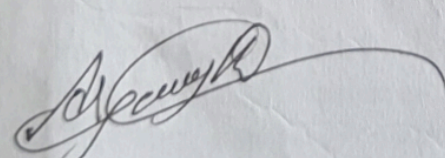
L – Lecture T- Tutorial P – Practical C– Credits Int. – Internal Ext. - External

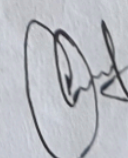
Elective – III

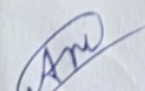
- Planning of Surface Mines (17160861 a)
- Planning of Underground Coal Mines (17160861 b)
- Planning of Underground Metal Mines (17160861 c)
- Tailing and Overburden dump Management (17160861 d)

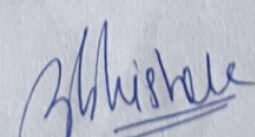

BOS (MINING) Chairman
(Dr. K. Srihari)


University Nominee
(Dr. B. Suryannarayana Sastry)


Subject Expert
(Dr. S. Jayanthu)


Industrial Expert
(Shri. J. Charan Sainath)


BOS Member
(Shri. A. Sandeep Kumar)


BOS Member
(Dr. A.K. Tripathi)


BOS Member
(Shri. P. Taviti Naidu)