



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| TD101    | Turkish Language I |                    |     |        |      |
|----------|--------------------|--------------------|-----|--------|------|
| Semester | Code               | Name               | T+P | Credit | ECTS |
| 1        | TD101              | Turkish Language I | 2   | 2      | 2    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Required       |

| Department/Program | Precondition | Course Coordinator | Instructor                 | Course Assistants |
|--------------------|--------------|--------------------|----------------------------|-------------------|
| Electricity        | None         |                    | Instructor Dr. ERDAL BARAN | None              |

The aim of lesson :

To make students become familiar with the correct, beautiful and efficient use of the Turkish language to make them base the written and spoken intercourse of the language on strong principals to make them gain their skills in correspondence, presentations and explanations successfully in their business life to make them become intellectual individuals who read, think, inquire and bring solutions.

Course Contents :

To improve students' love and understanding of mother tongue who are studying in various departments in accordance with the constantly progressing conditions of the age; to emphasize the connection between language and thought; to enlighten individuals who are scientifically productive, creative, able to use their mother tongue accurately and equipped with contemporary knowledge, in language and literature history.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1004   | ALTERNATIVE CURRENT CIRCUIT ANALYSIS |                                      |     |        |      |
|----------|--------------------------------------|--------------------------------------|-----|--------|------|
| Semester | Code                                 | Name                                 | T+P | Credit | ECTS |
| 2        | EL1004                               | ALTERNATIVE CURRENT CIRCUIT ANALYSIS | 3   | 3      | 5    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Required       |

| Department/Program | Precondition | Course Coordinator | Instructor               | Course Assistants |
|--------------------|--------------|--------------------|--------------------------|-------------------|
| Electricity        | None         |                    | Instructor Tufan DOĞRUER | None              |

The aim of lesson :

The terms of alternating current circuits can recognize and able to make necessary alternative circuit analyze

Course Contents :

The Alternative circuit terms, Obtaining an alternating current, Circuit analysis



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### Tokat Vocational School Electricity

| AIİT102  | Ataturk's Principles and History of Turkish Revolution II |                                                           |     |        |      |
|----------|-----------------------------------------------------------|-----------------------------------------------------------|-----|--------|------|
| Semester | Code                                                      | Name                                                      | T+P | Credit | ECTS |
| 2        | AIİT102                                                   | Ataturk's Principles and History of Turkish Revolution II | 2   | 2      | 2    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Required       |

| Department/Program | Precondition | Course Coordinator | Instructor                                                                                                                                                   | Course Assistants |
|--------------------|--------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Electricity        | None         |                    | Specialist Dr. İzzet Bahri ATEŞLİ<br>Specialist Dr. Ayşe ERYAMAN<br>Specialist Dr. Sadet ALTAY<br>Specialist Dr. Sabri ZENGİN<br>Specialist Dr. Adnan GELMEZ | None              |

The aim of lesson :

To understand Ataturk's reforms and how basic principles of the republic came into existence in Republic of Turkey establishment period. To help Turkish youth in the way of being unified individuals as a nation and becoming effective in the contemporary world.

Course Contents :

The last periods of the War of Independence. Treaties that caused the establishment of Republic of Turkey. Ataturk's principles which determine the features of Republic of Turkey and the revolutions which strengthen these principles



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1022             | COMPUTER AIDED DRAWING |                        |                          |                                                                                                                         |                   |
|--------------------|------------------------|------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------|
| Semester           | Code                   | Name                   | T+P                      | Credit                                                                                                                  | ECTS              |
| 2                  | EL1022                 | COMPUTER AIDED DRAWING | 3                        | 3                                                                                                                       | 3                 |
| Education Type     | Language               | Course Level           | Course Internship Status | Type of Course                                                                                                          |                   |
| Formal Education   | Turkish                | Associate              | No                       | Elective                                                                                                                |                   |
| Department/Program | Precondition           |                        | Course Coordinator       | Instructor                                                                                                              | Course Assistants |
| Electricity        |                        |                        | None                     | Asist Prof.Dr. alkhansa osman mohammed abdalla <a href="mailto:alkhansa.osman@gop.edu.tr">alkhansa.osman@gop.edu.tr</a> | None              |

The aim of lesson :

To make computer-aided circuit simulation and computer-aided design of electronic cards

Course Contents :

Electronic circuit design, Simulation of electronic circuits, Electronic card design



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2055             | POWER ELECTRONICS |                   |                          |                          |                   |
|--------------------|-------------------|-------------------|--------------------------|--------------------------|-------------------|
| Semester           | Code              | Name              | T+P                      | Credit                   | ECTS              |
| 3                  | EL2055            | POWER ELECTRONICS | 3                        | 3                        | 3                 |
| Education Type     | Language          | Course Level      | Course Internship Status | Type of Course           |                   |
| Formal Education   | Turkish           | Associate         | No                       | Elective                 |                   |
| Department/Program | Precondition      |                   | Course Coordinator       | Instructor               | Course Assistants |
| Electricity        |                   |                   | None                     | Specialist Dr. yavuz ARI | None              |

The aim of lesson :

This course aims at teaching the skills about the semiconductor switching elements, rectifier and chopper circuit for the information and applications.

Course Contents :

Thyristors and Trigger Circuits, Triac, Diya, MOSFET, IGBT Circuits, Single-phase Controlled and Uncontrolled Rectifier Circuits, Three-Phase Controlled and Uncontrolled Rectifier Circuits, Single-phase AC Choppers, Three-phase AC Choppers, Reducer and Amplifier Choppers, Current-fed Inverter, Voltage-fed Inverter, Direct Frequency Converters.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1032             | HYDRAULIC PNEUMATIC |                     |                          |                          |                   |
|--------------------|---------------------|---------------------|--------------------------|--------------------------|-------------------|
| Semester           | Code                | Name                | T+P                      | Credit                   | ECTS              |
| 2                  | EL1032              | HYDRAULIC PNEUMATIC | 3                        | 3                        | 3                 |
| Education Type     | Language            | Course Level        | Course Internship Status | Type of Course           |                   |
| Formal Education   | Turkish             | Associate           | No                       | Elective                 |                   |
| Department/Program | Precondition        |                     | Course Coordinator       | Instructor               | Course Assistants |
| Electricity        |                     |                     | None                     | Specialist Dr. Yavuz ARI | None              |

The aim of lesson :

This course aims to equip students with the skills necessary to install hydraulic and pneumatic systems.

Course Contents :

This course aims to equip students with the skills necessary to install hydraulic and pneumatic systems.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1030                                                                                                                                                                                                                                                                            | OCCUPATIONAL HEALTH AND SAFETY |                                |                          |                       |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------|-----------------------|-------------------|
| Semester                                                                                                                                                                                                                                                                          | Code                           | Name                           | T+P                      | Credit                | ECTS              |
| 2                                                                                                                                                                                                                                                                                 | EL1030                         | OCCUPATIONAL HEALTH AND SAFETY | 3                        | 3                     | 3                 |
| Education Type                                                                                                                                                                                                                                                                    | Language                       | Course Level                   | Course Internship Status | Type of Course        |                   |
| Formal Education                                                                                                                                                                                                                                                                  | Turkish                        | Associate                      | No                       | Elective              |                   |
| Department/Program                                                                                                                                                                                                                                                                |                                | Precondition                   | Course Coordinator       | Instructor            | Course Assistants |
| Electricity                                                                                                                                                                                                                                                                       |                                |                                | None                     | Instructor BURAK KARA | None              |
| The aim of lesson :                                                                                                                                                                                                                                                               |                                |                                |                          |                       |                   |
| The right to live and work in order to maintain the health and safety measures, parties the duties, powers, responsibilities, rights and obligations to inform about. Labour relationship with the skill to maintain the framework of occupational health and safety legislation. |                                |                                |                          |                       |                   |
| Course Contents :                                                                                                                                                                                                                                                                 |                                |                                |                          |                       |                   |
| first aid education and job security                                                                                                                                                                                                                                              |                                |                                |                          |                       |                   |



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|                                                                                                          |                                    |                                    |                          |                                  |                   |
|----------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------|--------------------------|----------------------------------|-------------------|
| EL2083                                                                                                   | IN QUALITY ASSURANCE AND STANDARTS |                                    |                          |                                  |                   |
| Semester                                                                                                 | Code                               | Name                               | T+P                      | Credit                           | ECTS              |
| 3                                                                                                        | EL2083                             | IN QUALITY ASSURANCE AND STANDARTS | 3                        | 3                                | 3                 |
| Education Type                                                                                           | Language                           | Course Level                       | Course Internship Status | Type of Course                   |                   |
| Formal Education                                                                                         | Turkish                            | Associate                          | No                       | Elective                         |                   |
| Department/Program                                                                                       |                                    | Precondition                       | Course Coordinator       | Instructor                       | Course Assistants |
| Electricity                                                                                              |                                    |                                    | None                     | Associate Prof.Dr. TUFAN DOĞRUER | None              |
| The aim of lesson :                                                                                      |                                    |                                    |                          |                                  |                   |
| With this course, in business life and standards related to quality assurance of qualifications to teach |                                    |                                    |                          |                                  |                   |
| Course Contents :                                                                                        |                                    |                                    |                          |                                  |                   |
| Oral and visual expression, presentation, discussion, practice, homework                                 |                                    |                                    |                          |                                  |                   |



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1042                                                                                                                                                                                                                                                                 | Vocational Foreign Language I |                               |                          |                      |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|--------------------------|----------------------|-------------------|
| Semester                                                                                                                                                                                                                                                               | Code                          | Name                          | T+P                      | Credit               | ECTS              |
| 2                                                                                                                                                                                                                                                                      | EL1042                        | Vocational Foreign Language I | 3                        | 3                    | 3                 |
| Education Type                                                                                                                                                                                                                                                         | Language                      | Course Level                  | Course Internship Status | Type of Course       |                   |
| Formal Education                                                                                                                                                                                                                                                       | Turkish                       | Associate                     | No                       | Elective             |                   |
| Department/Program                                                                                                                                                                                                                                                     |                               | Precondition                  | Course Coordinator       | Instructor           | Course Assistants |
| Electricity                                                                                                                                                                                                                                                            |                               |                               | None                     | Prof.Dr. CEM EMEKSIZ | None              |
| The aim of lesson :                                                                                                                                                                                                                                                    |                               |                               |                          |                      |                   |
| The aim of the course is to enable students to be aware of their vocational terminology in English language, to improve their capability in expressing themselves in business environment, and to achieve self-confidence in language use in international activities. |                               |                               |                          |                      |                   |
| Course Contents :                                                                                                                                                                                                                                                      |                               |                               |                          |                      |                   |
| Unit Exercises / listening / videos                                                                                                                                                                                                                                    |                               |                               |                          |                      |                   |



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1028   | BOARD DESIGN AND INSTALLATION |                               |     |        |      |
|----------|-------------------------------|-------------------------------|-----|--------|------|
| Semester | Code                          | Name                          | T+P | Credit | ECTS |
| 2        | EL1028                        | BOARD DESIGN AND INSTALLATION | 3   | 3      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator | Instructor                         | Course Assistants |
|--------------------|--------------|--------------------|------------------------------------|-------------------|
| Electricity        |              | None               | Asist.Prof.Dr. ABDULKADİR GÖZÜOĞLU | None              |

The aim of lesson :

Materials, in accordance with the standards of the project and the selection and clipboard mounting, cable and busbar connections between devices to be accurate and in compliance with standards, rather than testing and installation of all types of panels to gain competency.

Course Contents :

Characteristics and the use of tools and equipment used in the construction of electrical panels explaining Types of switches used in electrical panels explaining the features and operating principles Explanation of features and operating principles used in electrical panels, types of insurance Explanation of the design and construction of a single-phase electrical panels, lighting fittings Explanation of the design and construction of the main panel of three-phase systems One-and three-phase systems drawing boards explaining the internal circuits Explanation of the design and construction of three-phase power supplies electrical panels Drawing boards explaining the internal circuits of electric three-phase power supplies Explanation of the design and construction of medium voltage transformer cabinets mail Explanation of the design and construction of high-voltage measuring cell panels Explanation of the design and construction of the control distribution panels Explanation of the design and construction of the operator control panels Explanation of the design and construction of the compensation boards Explanation of the design and construction of the compensation boards.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| İNG102   | English II |            |     |        |      |
|----------|------------|------------|-----|--------|------|
| Semester | Code       | Name       | T+P | Credit | ECTS |
| 2        | İNG102     | English II | 2   | 2      | 2    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator | Instructor               | Course Assistants |
|--------------------|--------------|--------------------|--------------------------|-------------------|
| Electricity        |              | None               | Instructor H.Tüzün Paçcı | None              |

The aim of lesson :

The objective of this course is to be able to bring the students to the A2 Level in terms of CEF.

Course Contents :

Compulsory Foreign Language Course ( English)



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1038   | INTRODUCTION INSTALLATION |                           |     |        |      |
|----------|---------------------------|---------------------------|-----|--------|------|
| Semester | Code                      | Name                      | T+P | Credit | ECTS |
| 2        | EL1038                    | INTRODUCTION INSTALLATION | 3   | 3      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator | Instructor               | Course Assistants |
|--------------------|--------------|--------------------|--------------------------|-------------------|
| Electricity        |              | None               | Instructor B. Okan İÇMEZ | None              |

The aim of lesson :

Recognizes the need for energy efficiency in understanding the compensation systems. Understand the importance of the protection installations. Security installations, applications used today to learn.

Course Contents :

Effects of the network power factor and reactive loads. The purpose of the compensation system and the general structural properties, Compensation system for the power, power factor, and the forces of compensation calculations, Creation and implementation of compensation Installations, Harmonics, harmonic filters, the implementation, Lightning protection systems characteristics, types, Lightning protection for the discovery and calculation Installations, Installations implementation of Lightning, The creation of the ground installations, The creation of the ground installations, Midterm Exam, The creation of the ground installations, Purpose and scope of Security Systems, Make Security Systems Installation, Make Security Systems Installation, Closed-circuit video systems, Closed-circuit video systems,



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### Tokat Vocational School Electricity

| EL1010             | TRANSFORMER AND D.C. MACHINES |                               |                          |                                                                                        |                   |
|--------------------|-------------------------------|-------------------------------|--------------------------|----------------------------------------------------------------------------------------|-------------------|
| Semester           | Code                          | Name                          | T+P                      | Credit                                                                                 | ECTS              |
| 2                  | EL1010                        | TRANSFORMER AND D.C. MACHINES | 3                        | 3                                                                                      | 4                 |
| Education Type     | Language                      | Course Level                  | Course Internship Status | Type of Course                                                                         |                   |
| Formal Education   | Turkish                       | Associate                     | No                       | Required                                                                               |                   |
| Department/Program | Precondition                  |                               | Course Coordinator       | Instructor                                                                             | Course Assistants |
| Electricity        |                               |                               | None                     | Instructor BURAK KARA <a href="mailto:burak.kara@gop.edu.tr">burak.kara@gop.edu.tr</a> | None              |

The aim of lesson :

The aim of this course is to teach the structures of electric machines and their working principles.

Course Contents :

DA structure and operating principles of electric machines, armature winding required for calculations, drawing diagrams armature winding, armature reaction and commutation machines, DA, DA DA engines, generators and parallel to the binding, DC motors, electric motors opposing force (emf), engine speed adjustment DA, DA loss of engine efficiency, sample problems, a special type of DC machines, transformers operating principles, structures, single and three phase transformers, winding connections, work patterns, parallel connection of transformers, sample problems, a special type transformers.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| TD102              | Turkish Language II |                     |                          |                            |                   |
|--------------------|---------------------|---------------------|--------------------------|----------------------------|-------------------|
| Semester           | Code                | Name                | T+P                      | Credit                     | ECTS              |
| 2                  | TD102               | Turkish Language II | 2                        | 2                          | 2                 |
| Education Type     | Language            | Course Level        | Course Internship Status | Type of Course             |                   |
| Formal Education   | Turkish             | Associate           | No                       | Required                   |                   |
| Department/Program | Precondition        |                     | Course Coordinator       | Instructor                 | Course Assistants |
| Electricity        |                     |                     | None                     | Instructor Dr. ERDAL BARAN | None              |

The aim of lesson :

To make students become familiar with the correct, beautiful and efficient use of the Turkish language to make them base the written and spoken intercourse of the language on strong principals to make them gain their skills in correspondence, presentations and explanations successfully in their business life to make them become intellectual individuals who read, think, inquire and bring solutions.

Course Contents :

According to their subjects, reading, listening, writing, presentation, discussion, sampling, question and answer techniques will be used.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2001             | ASYNCHRONOUS AND SYNCHRONOUS MACHIN |                                     |                          |                                                                                        |                   |
|--------------------|-------------------------------------|-------------------------------------|--------------------------|----------------------------------------------------------------------------------------|-------------------|
| Semester           | Code                                | Name                                | T+P                      | Credit                                                                                 | ECTS              |
| 3                  | EL2001                              | ASYNCHRONOUS AND SYNCHRONOUS MACHIN | 3                        | 3                                                                                      | 5                 |
| Education Type     | Language                            | Course Level                        | Course Internship Status | Type of Course                                                                         |                   |
| Formal Education   | Turkish                             | Associate                           | No                       | Required                                                                               |                   |
| Department/Program | Precondition                        |                                     | Course Coordinator       | Instructor                                                                             | Course Assistants |
| Electricity        |                                     |                                     | None                     | Instructor BURAK KARA <a href="mailto:burak.kara@gop.edu.tr">burak.kara@gop.edu.tr</a> | None              |

The aim of lesson :

In this course, all kinds of asynchronous and synchronous ends of the presence of electrical machines, commissioning and operation of binding to and is intended to gain qualifications.

Course Contents :

Lecture, Practice, Homework, Project



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1034   | COMPUTER AIDED PROJECT |                        |     |        |      |
|----------|------------------------|------------------------|-----|--------|------|
| Semester | Code                   | Name                   | T+P | Credit | ECTS |
| 2        | EL1034                 | COMPUTER AIDED PROJECT | 3   | 3      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator         | Instructor                                     | Course Assistants |
|--------------------|--------------|----------------------------|------------------------------------------------|-------------------|
| Electricity        |              | Asist Prof.Dr. Ünsal Aybek | Asist Prof.Dr. ALKHANSA OSMAN MOHAMMED ABDALLA | None              |

The aim of lesson :

In this course, students will draw the electronic circuits and they will prepare the printed circuit board with the program

Course Contents :

1. Electrical Circuits Drawing Program 2. Project Applications



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1024   | ELECTRIC POWER PLANTS |                       |     |        |      |
|----------|-----------------------|-----------------------|-----|--------|------|
| Semester | Code                  | Name                  | T+P | Credit | ECTS |
| 2        | EL1024                | ELECTRIC POWER PLANTS | 3   | 3      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator | Instructor                                                                             | Course Assistants |
|--------------------|--------------|--------------------|----------------------------------------------------------------------------------------|-------------------|
| Electricity        |              | None               | Instructor BURAK KARA <a href="mailto:burak.kara@gop.edu.tr">burak.kara@gop.edu.tr</a> | None              |

The aim of lesson :

To know the methods of obtaining electrical energy,Kinds of the electrical power plants,To learn working principles and operating specifications....

Course Contents :

Lecture, Practice, Homework, Project



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1016   | ELECTROMECHANICAL CONTROL SYSTEMS |                                   |     |        |      |
|----------|-----------------------------------|-----------------------------------|-----|--------|------|
| Semester | Code                              | Name                              | T+P | Credit | ECTS |
| 2        | EL1016                            | ELECTROMECHANICAL CONTROL SYSTEMS | 3   | 3      | 4    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Required       |

| Department/Program | Precondition | Course Coordinator | Instructor           | Course Assistants |
|--------------------|--------------|--------------------|----------------------|-------------------|
| Electricity        |              | None               | Instructor Yavuz ARI | None              |

The aim of lesson :

In this course, students will be able to assemble electromechanical control equipments and control one phase, three-phase asynchronous and direct current motors running, change the direction of the speed, braking operations using electromechanical components.

Course Contents :

Lecture, Practice, Homework, Project



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1026             | HOME DEVICES |              |                            |                                                |                   |
|--------------------|--------------|--------------|----------------------------|------------------------------------------------|-------------------|
| Semester           | Code         | Name         | T+P                        | Credit                                         | ECTS              |
| 2                  | EL1026       | HOME DEVICES | 3                          | 3                                              | 3                 |
| Education Type     | Language     | Course Level | Course Internship Status   | Type of Course                                 |                   |
| Formal Education   | Turkish      | Associate    | No                         | Elective                                       |                   |
| Department/Program | Precondition |              | Course Coordinator         | Instructor                                     | Course Assistants |
| Electricity        |              |              | Asist Prof.Dr. Ünsal Aybek | Asist Prof.Dr. Alkhansa Osman Mohammed Abdalla | None              |

The aim of lesson :

This course aims to provide knowledge and skills to introduce home appliances.

Course Contents :

home appliances



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2069             | SPECIAL DESIGNED MOTORS |                         |                          |                          |                   |
|--------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------|
| Semester           | Code                    | Name                    | T+P                      | Credit                   | ECTS              |
| 3                  | EL2069                  | SPECIAL DESIGNED MOTORS | 3                        | 3                        | 3                 |
| Education Type     | Language                | Course Level            | Course Internship Status | Type of Course           |                   |
| Formal Education   | Turkish                 | Associate               | No                       | Elective                 |                   |
| Department/Program | Precondition            |                         | Course Coordinator       | Instructor               | Course Assistants |
| Electricity        |                         |                         | None                     | Instructor B. Okan İÇMEZ | None              |

The aim of lesson :

All kinds of tips have custom-designed engines, commissioning and operation of connected transactions aimed to gain qualifications.

Course Contents :

The structure and operation of stepper motors, servo motors, the structure and operation, structure and operation of single-phase auxiliary winding motors, universal motors and operation of the structure, the structure and operation of linear motors, shade pole motors and operation of the structure.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| KRY102             | Career Planning |                 |                          |                                                                                                                     |                   |
|--------------------|-----------------|-----------------|--------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------|
| Semester           | Code            | Name            | T+P                      | Credit                                                                                                              | ECTS              |
| 2                  | KRY102          | Career Planning | 1                        | 1                                                                                                                   | 2                 |
| Education Type     | Language        | Course Level    | Course Internship Status | Type of Course                                                                                                      |                   |
| Formal Education   | Turkish         | Associate       | No                       | Required                                                                                                            |                   |
| Department/Program | Precondition    |                 | Course Coordinator       | Instructor                                                                                                          | Course Assistants |
| Electricity        |                 |                 | None                     | Asist Prof.Dr. Erdal Taha AYDOĞDU<br><a href="mailto:erdaltaha.aydogdu@gop.edu.tr">erdaltaha.aydogdu@gop.edu.tr</a> | None              |

The aim of lesson :

The Career Planning course aims to help students understand the business world, different sectors, and the requirements of these sectors, thereby raising awareness among students about the importance of career planning in the process of preparing for the business world. The course helps students discover their personal competencies and correctly understand the expectations of the business world, enabling them to develop their knowledge and skills in line with the requirements of relevant sectors.

Course Contents :

General introduction to the course and the concept of career, National and international exchange programs, Basic communication skills, Industry days (Non-Governmental Organizations), Soft skills, Industry days (Public Sector), Diction and body language, Resume and cover letter preparation, Industry days (Private Sector), Effective interview techniques, Industry days (Academia), Industry days (Entrepreneurship), Course evaluation and project details



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2047             | ELECTRONIC CIRCUIT DESIGN |                           |                          |                                                                                        |                   |
|--------------------|---------------------------|---------------------------|--------------------------|----------------------------------------------------------------------------------------|-------------------|
| Semester           | Code                      | Name                      | T+P                      | Credit                                                                                 | ECTS              |
| 3                  | EL2047                    | ELECTRONIC CIRCUIT DESIGN | 3                        | 3                                                                                      | 3                 |
| Education Type     | Language                  | Course Level              | Course Internship Status | Type of Course                                                                         |                   |
| Formal Education   | Turkish                   | Associate                 | No                       | Elective                                                                               |                   |
| Department/Program | Precondition              |                           | Course Coordinator       | Instructor                                                                             | Course Assistants |
| Electricity        |                           |                           | None                     | Instructor BURAK KARA <a href="mailto:burak.kara@gop.edu.tr">burak.kara@gop.edu.tr</a> | None              |

The aim of lesson :

The student, with computer circuits and printed circuit schematic drawing of-print loop preparation.

Course Contents :

In this course, circuit design fundamentals, circuit elements in the settlement principles, circuit elements in the package shapes, circuit elements, catalog views, circuit design program examined the ISIS PROTEUS circuit design software use and applications are made.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1040             | OFFICE SOFTWARE |                 |                          |                                                                                        |                   |
|--------------------|-----------------|-----------------|--------------------------|----------------------------------------------------------------------------------------|-------------------|
| Semester           | Code            | Name            | T+P                      | Credit                                                                                 | ECTS              |
| 2                  | EL1040          | OFFICE SOFTWARE | 3                        | 3                                                                                      | 3                 |
| Education Type     | Language        | Course Level    | Course Internship Status | Type of Course                                                                         |                   |
| Formal Education   | Turkish         | Associate       | No                       | Elective                                                                               |                   |
| Department/Program | Precondition    |                 | Course Coordinator       | Instructor                                                                             | Course Assistants |
| Electricity        |                 |                 | None                     | Instructor BURAK KARA <a href="mailto:burak.kara@gop.edu.tr">burak.kara@gop.edu.tr</a> | None              |

The aim of lesson :

In this course the possibilities of using information to gain qualifications aims to develop themselves.

Course Contents :

The use of the word processor program, Digital Data Editing, Presentation Preparation, Material Preparation, Use of Internet Browser, E-Mail Management, Electronic Commerce.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2077             | AGREEMENT, EXPLORATION AND PLANNING |                                     |                          |                                    |                   |
|--------------------|-------------------------------------|-------------------------------------|--------------------------|------------------------------------|-------------------|
| Semester           | Code                                | Name                                | T+P                      | Credit                             | ECTS              |
| 3                  | EL2077                              | AGREEMENT, EXPLORATION AND PLANNING | 3                        | 3                                  | 3                 |
| Education Type     | Language                            | Course Level                        | Course Internship Status | Type of Course                     |                   |
| Formal Education   | Turkish                             | Associate                           | No                       | Elective                           |                   |
| Department/Program | Precondition                        |                                     | Course Coordinator       | Instructor                         | Course Assistants |
| Electricity        |                                     |                                     | None                     | Asist Prof.Dr. ABDULKADİR GÖZÜOĞLU | None              |

The aim of lesson :

In this course, students study the pre-project planning, site survey, preparation of contracts and specifications are intended to gain proficiency.

Course Contents :

Lecture, Practice, Homework, Project



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

|                                                                                                                                  |                  |                  |                            |                                                |                   |
|----------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|----------------------------|------------------------------------------------|-------------------|
| EL2071                                                                                                                           | FAILURE ANALYSIS |                  |                            |                                                |                   |
| Semester                                                                                                                         | Code             | Name             | T+P                        | Credit                                         | ECTS              |
| 3                                                                                                                                | EL2071           | FAILURE ANALYSIS | 3                          | 3                                              | 3                 |
| Education Type                                                                                                                   | Language         | Course Level     | Course Internship Status   | Type of Course                                 |                   |
| Formal Education                                                                                                                 | Turkish          | Associate        | No                         | Elective                                       |                   |
| Department/Program                                                                                                               |                  | Precondition     | Course Coordinator         | Instructor                                     | Course Assistants |
| Electricity                                                                                                                      |                  |                  | Asist Prof.Dr. Ünsal AYBEK | Asist Prof.Dr. Alkhansa OSMAN MOHAMMED ABDALLA | None              |
| The aim of lesson :<br>Comprehension of measurement and diagnosis logic, development maintenance and trouble shooting capability |                  |                  |                            |                                                |                   |
| Course Contents :<br>Diagnosis (troubleshooting) and maintenance by using measurement and test devices                           |                  |                  |                            |                                                |                   |



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

|                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |                                     |                          |                                                |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|--------------------------|------------------------------------------------|-------------------|
| EL1036                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ELECTRICITY TRANSMISSION AND DISTRI |                                     |                          |                                                |                   |
| Semester                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Code                                | Name                                | T+P                      | Credit                                         | ECTS              |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                        | EL1036                              | ELECTRICITY TRANSMISSION AND DISTRI | 3                        | 3                                              | 3                 |
| Education Type                                                                                                                                                                                                                                                                                                                                                                                                                                           | Language                            | Course Level                        | Course Internship Status | Type of Course                                 |                   |
| Formal Education                                                                                                                                                                                                                                                                                                                                                                                                                                         | Turkish                             | Associate                           | No                       | Elective                                       |                   |
| Department/Program                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                     | Precondition                        | Course Coordinator       | Instructor                                     | Course Assistants |
| Electricity                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                     |                                     | None                     | Asist Prof.Dr. ALKHANSA OSMAN MOHAMMED ABDALLA | None              |
| The aim of lesson :                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |                                     |                          |                                                |                   |
| In this course, the introduction of materials of all kinds of high-voltage networks, aimed to gain qualifications for the installation of the operations.                                                                                                                                                                                                                                                                                                |                                     |                                     |                          |                                                |                   |
| Course Contents :                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                     |                                     |                          |                                                |                   |
| Pole mounting, poles traverse the console assembly, insulators and other elements on the installation, and connection of the withdrawal of overhead line conductors, poles, lines, equipment and maintenance, elimination of the failures PTL, the power transformer and installation of instrument transformers, busbar system, splitter and cutter assembly, Switching systems eliminate the failures, maintenance of the panels and measuring systems |                                     |                                     |                          |                                                |                   |



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

|                                                                                                                                                           |                                |                                |                          |                |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------|----------------|-------------------|
| EL2079                                                                                                                                                    | Vocational Foreign Language II |                                |                          |                |                   |
| Semester                                                                                                                                                  | Code                           | Name                           | T+P                      | Credit         | ECTS              |
| 3                                                                                                                                                         | EL2079                         | Vocational Foreign Language II | 3                        | 3              | 3                 |
| Education Type                                                                                                                                            | Language                       | Course Level                   | Course Internship Status | Type of Course |                   |
| Formal Education                                                                                                                                          | Turkish                        | Associate                      | No                       | Elective       |                   |
| Department/Program                                                                                                                                        |                                | Precondition                   | Course Coordinator       | Instructor     | Course Assistants |
| Electricity                                                                                                                                               |                                |                                | None                     | None           | None              |
| The aim of lesson :<br>Bu derste öğrenciye; temel mesleki kavram ve tanımları ile temel mesleki dil bilgisi yeterliklerinin kazandırılması amaçlanmıştır. |                                |                                |                          |                |                   |
| Course Contents :                                                                                                                                         |                                |                                |                          |                |                   |



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2011   | PROGRAMMABLE CONTROLLERS |                          |     |        |      |
|----------|--------------------------|--------------------------|-----|--------|------|
| Semester | Code                     | Name                     | T+P | Credit | ECTS |
| 3        | EL2011                   | PROGRAMMABLE CONTROLLERS | 3   | 3      | 5    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Required       |

| Department/Program | Precondition | Course Coordinator | Instructor              | Course Assistants |
|--------------------|--------------|--------------------|-------------------------|-------------------|
| Electricity        |              | None               | Specialist Dr. Yvuz ARI | None              |

The aim of lesson :

Programmable logic controllers understand the structure and working, ladder diagram and PLC programming, PLC programming interpret existing programs with a solution to a problem, interpret and develop the skills to win.

Course Contents :

Programmable controllers, PLCs basic units, logic operations, programming, ladder diagram and ladder diagram programming instructions, set- reset commands, timer-counter applications, comparison instructions, PLC automation systems design using



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2081   | SCADA SYSTEMS |               |     |        |      |
|----------|---------------|---------------|-----|--------|------|
| Semester | Code          | Name          | T+P | Credit | ECTS |
| 3        | EL2081        | SCADA SYSTEMS | 3   | 3      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator | Instructor           | Course Assistants |
|--------------------|--------------|--------------------|----------------------|-------------------|
| Electricity        |              | None               | Instructor Yavuz ARI | None              |

The aim of lesson :

SCADA system of the building and record-keeping procedures to gain qualifications.

Course Contents :

Scada program to practice with. Scada to design. Visual programming. With visual programming to SCADA application.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2075   | SENSORS AND TRANSDUSERS |                         |     |        |      |
|----------|-------------------------|-------------------------|-----|--------|------|
| Semester | Code                    | Name                    | T+P | Credit | ECTS |
| 3        | EL2075                  | SENSORS AND TRANSDUSERS | 3   | 3      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator | Instructor                | Course Assistants |
|--------------------|--------------|--------------------|---------------------------|-------------------|
| Electricity        |              | None               | Instructor M.Taner TUNCAY | None              |

The aim of lesson :

In this course, each kind of sensor, the corresponding circuit is aimed to gain the knowledge and skills to use.

Course Contents :

Sensor and transducer concepts, homes, work places and the sensors used in industry recognition, to use the work, make the appropriate selection of sensors is discussed.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL2073   | SYSTEMS DESIGN AND ANALYSIS |                             |     |        |      |
|----------|-----------------------------|-----------------------------|-----|--------|------|
| Semester | Code                        | Name                        | T+P | Credit | ECTS |
| 3        | EL2073                      | SYSTEMS DESIGN AND ANALYSIS | 3   | 3      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Elective       |

| Department/Program | Precondition | Course Coordinator         | Instructor                                     | Course Assistants |
|--------------------|--------------|----------------------------|------------------------------------------------|-------------------|
| Electricity        |              | Asist Prof.Dr. Ünsal Aybek | Asist Prof.Dr. Alkhansa OSMAN MOHAMMED ABDALLA | None              |

The aim of lesson :  
Students divided into groups, implementation project design, circuit design is aimed to gain the knowledge and skills.  
Course Contents :  
implementation project design



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| AIİT101  | Ataturk's Principles and History of Turkish Revolution I |                                                          |     |        |      |
|----------|----------------------------------------------------------|----------------------------------------------------------|-----|--------|------|
| Semester | Code                                                     | Name                                                     | T+P | Credit | ECTS |
| 1        | AIİT101                                                  | Ataturk's Principles and History of Turkish Revolution I | 2   | 2      | 2    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Required       |

| Department/Program | Precondition | Course Coordinator | Instructor                                                                                 | Course Assistants |
|--------------------|--------------|--------------------|--------------------------------------------------------------------------------------------|-------------------|
| Electricity        |              | None               | Specialist Dr. UĞUR POLAT <a href="mailto:ugur.polat@gop.edu.tr">ugur.polat@gop.edu.tr</a> | None              |

The aim of lesson :  
To understand Ataturk's reforms and how basic principles of the republic came into existence in Republic of Turkey establishment period. To help Turkish youth in the way of being unified individuals as a nation and becoming effective in the contemporary world.  
Course Contents :  
The last periods of the War of Independence. Treaties that causes the establishment of Republic of Turkey. Ataturk's principles which determine the features of Republic of Turkey and the revolutions which strengthen these principles



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| ENF100   | INFORMATION TECHNOLOGIES AND OFFICE SOFTWARE |                                              |     |        |      |
|----------|----------------------------------------------|----------------------------------------------|-----|--------|------|
| Semester | Code                                         | Name                                         | T+P | Credit | ECTS |
| 1        | ENF100                                       | INFORMATION TECHNOLOGIES AND OFFICE SOFTWARE | 2   | 2      | 3    |

| Education Type   | Language | Course Level | Course Internship Status | Type of Course |
|------------------|----------|--------------|--------------------------|----------------|
| Formal Education | Turkish  | Associate    | No                       | Required       |

| Department/Program | Precondition | Course Coordinator | Instructor                                                                             | Course Assistants |
|--------------------|--------------|--------------------|----------------------------------------------------------------------------------------|-------------------|
| Electricity        |              | None               | Instructor BURAK KARA <a href="mailto:burak.kara@gop.edu.tr">burak.kara@gop.edu.tr</a> | None              |

The aim of lesson :  
In this course is intended to develop themselves to gain qualifications by using computational facilities  
Course Contents :  
Expression, demonstrating taking, problem solving, question-answer, group work, practical work, research, and individual teaching methods and techniques are applied as teaching



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1003             | DIRECT CURRENT CIRCUIT ANALYSIS |                                 |                          |                                                                                        |                   |
|--------------------|---------------------------------|---------------------------------|--------------------------|----------------------------------------------------------------------------------------|-------------------|
| Semester           | Code                            | Name                            | T+P                      | Credit                                                                                 | ECTS              |
| 1                  | EL1003                          | DIRECT CURRENT CIRCUIT ANALYSIS | 3                        | 3                                                                                      | 4                 |
| Education Type     | Language                        | Course Level                    | Course Internship Status | Type of Course                                                                         |                   |
| Formal Education   | Turkish                         | Associate                       | No                       | Required                                                                               |                   |
| Department/Program | Precondition                    |                                 | Course Coordinator       | Instructor                                                                             | Course Assistants |
| Electricity        |                                 |                                 | None                     | Instructor BURAK KARA <a href="mailto:burak.kara@gop.edu.tr">burak.kara@gop.edu.tr</a> | None              |

The aim of lesson :

To explain the basic concepts of electrical circuits and dc circuits in the steady-state solution and to have knowledge about the methods.

Course Contents :

To explain the basic concepts of electrical circuits and dc circuits in the steady-state solution and to have knowledge about the methods.



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| İNG101             | English I    |              |                          |                                                                                           |                   |
|--------------------|--------------|--------------|--------------------------|-------------------------------------------------------------------------------------------|-------------------|
| Semester           | Code         | Name         | T+P                      | Credit                                                                                    | ECTS              |
| 1                  | İNG101       | English I    | 2                        | 2                                                                                         | 2                 |
| Education Type     | Language     | Course Level | Course Internship Status | Type of Course                                                                            |                   |
| Formal Education   | Turkish      | Associate    | No                       | Elective                                                                                  |                   |
| Department/Program | Precondition |              | Course Coordinator       | Instructor                                                                                | Course Assistants |
| Electricity        |              |              | None                     | Instructor Hakan Akkan <a href="mailto:hakan.akkan@gop.edu.tr">hakan.akkan@gop.edu.tr</a> | None              |

The aim of lesson :

The objective of this course is to be able to bring the students to the A2 Level in terms of CEF.

Course Contents :

Compulsory Foreign Language Courses (English)



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1009             | MATHEMATICS  |              |                             |                                                |                   |
|--------------------|--------------|--------------|-----------------------------|------------------------------------------------|-------------------|
| Semester           | Code         | Name         | T+P                         | Credit                                         | ECTS              |
| 1                  | EL1009       | MATHEMATICS  | 3                           | 3                                              | 3                 |
| Education Type     | Language     | Course Level | Course Internship Status    | Type of Course                                 |                   |
| Formal Education   | Turkish      | Associate    | No                          | Required                                       |                   |
| Department/Program | Precondition |              | Course Coordinator          | Instructor                                     | Course Assistants |
| Electricity        |              |              | Asist Prof.Dr. Ünsal Ayberk | Asist Prof.Dr. ALKHANSA OSMAN MOHAMMED ABDALLA | None              |

The aim of lesson :

Give the key concept to student to solve basic math problems related to computer programs

Course Contents :

Arithmetic and algebraic operations, the first order one and two unknowns Equations, simple inequalities, Base and Root-making and problem-solving (Percent, age, speed problems, etc.)



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1007             | MEASURING TECHNIQUE |                     |                            |                                                   |                   |
|--------------------|---------------------|---------------------|----------------------------|---------------------------------------------------|-------------------|
| Semester           | Code                | Name                | T+P                        | Credit                                            | ECTS              |
| 1                  | EL1007              | MEASURING TECHNIQUE | 3                          | 3                                                 | 4                 |
| Education Type     | Language            | Course Level        | Course Internship Status   | Type of Course                                    |                   |
| Formal Education   | Turkish             | Associate           | No                         | Required                                          |                   |
| Department/Program | Precondition        |                     | Course Coordinator         | Instructor                                        | Course Assistants |
| Electricity        |                     |                     | Asist Prof.Dr. Ünsal Aybek | Asist Prof.Dr. ALKHANSA OSMAN<br>MOHAMMED ABDALLA | None              |

The aim of lesson :

The student, reading circuit elements, measuring instruments and measuring with the oscilloscope to do. Job security is intended to gain the competencies required to provide.

Course Contents :

MEASURING TOOLS



## Tokat Gaziosmanpaşa University

### Tokat Vocational School Electricity

| EL1013             | BASİC ELECTRONICS |                   |                            |                                                   |                   |
|--------------------|-------------------|-------------------|----------------------------|---------------------------------------------------|-------------------|
| Semester           | Code              | Name              | T+P                        | Credit                                            | ECTS              |
| 1                  | EL1013            | BASİC ELECTRONICS | 3                          | 3                                                 | 4                 |
| Education Type     | Language          | Course Level      | Course Internship Status   | Type of Course                                    |                   |
| Formal Education   | Turkish           | Associate         | No                         | Required                                          |                   |
| Department/Program | Precondition      |                   | Course Coordinator         | Instructor                                        | Course Assistants |
| Electricity        |                   |                   | Asist Prof.Dr. Ünsal Aybek | Asist Prof.Dr. ALKHANSA OSMAN<br>MOHAMMED ABDALLA | None              |

The aim of lesson :

Providing general information about structure of an atom, behaviour of particles of an atom and explaining the contribution of these behaviours to electrical conduction, explaining operating principle of PN junctions, BJT transistors, MOSFET and JFET transistor

Course Contents :

Structure of an atom, Energy bands, Electron Emission types, Electron behaviour, Electronic Circuit Elements, Conduction in metals and semiconductors, PN junction and semiconductor diode, biasing and operating bipolar transistor, using bipolar transistor as an amplifier, equivalent circuits of bipolar transistor, junction field effect transistors, MOS transistors, Power Electronic Elements, Thermal stability in transistor