

Advanced conversion systems of resource energy

2 units (selection)

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Target) To learn special knowledge concerning present energy resources and energy supplying systems, to understand principle and mechanism of energy conversion, and to improve thinking faculty for application of new energy and its conversion

Outline) To explain effective combustion technologies, reasonable utilization of energy and application of unused energy for saving consumption of fossil fuels and primary energy on the point of saving resources, energy and preserving the environment

Style) Portfolio

Keyword) *energy conversion, energy resources, utilization of energy, environmental protection, energy saving*

Requirement) None

Notice) None

Goal) To understand fundamentals of energy conversion and to consider effective utilization of energy and improvement of energy conversion technologies

Schedule)

1. Present state of energy resources
2. Energy and environmental problem
3. Future view of energy resources
4. Fundamentals of energy conversion (1)
5. Fundamentals of energy conversion (2)
6. Principle of energy conversion (1)
7. Principle of energy conversion (2)
8. Principle of energy conversion (3)
9. Technologies of energy conversion (1)
10. Technologies of energy conversion (2)
11. Technologies of energy conversion (3)
12. Approach to effective utilization of energy (1)
13. Approach to effective utilization of energy (2)
14. Application of new energy (1)
15. Application of new energy (2)

Evaluation Criteria) Appraise the understanding of the content of the lecture by setting some reports

Textbook) None

Reference) None

Webpage) <http://www.eco.tokushima-u.ac.jp/w3/miwa/index.html>

Contents) <http://cms.db.tokushima-u.ac.jp/cgi-bin/toURL?EID=216678>

Student) Able to be taken by only specified class(es)

Contact)

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Note)

- ◇ Need to submit some reports
- ◇ Every lesson is planned to attain the targets of this lecture. Students' achievement of the targets is partly accessed by the reports.