**Course content C1**

1. **Atoms, elements, and compounds**
2. **Electronic structure**
3. **Electrons in bonding**
4. **Reactions**
5. **Mixtures**
6. **Models of the atom**
7. **Relative in size of atom**
8. **The mass of atoms**
9. **Development of periodic table**
10. **Trends in periodic table**
11. **Trends in group 0**
12. **Group 1 alkali metals**
13. **Group 7 Halogens**
14. **IONIC BONDIN**
15. **Properties of ionic compounds**
16. **Structures of ionic compounds**
17. **Covalent structures**
18. **Giant covalent structures**
19. **Metallic bonding**
20. **Metals as conductors**
21. **States of matter**
22. **Conservation of mass**
23. **Relative formula mass**
24. **Percentage and formula**
25. **Equations and calculations**
26. **Using moles to balance equations**
27. **Limiting reactants**
28. **Concentrations of solutions**
29. **Metals and reactivity series**
30. **Metal extraction-reduction by carbon**
31. **Metal extraction-electrolysis**
32. **Electrolysis**
33. **The extraction of aluminium**
34. **Electrolysis of brine**
35. **Making salts from solid metals or bases**
36. **Making salts from solutions**
37. **Acids and alkalis**
38. **Exothermic or Endothermic**
39. **Endo-Exo REACTIONS & Energy Levels**
40. **Bond Energies**

**Course content C2**

1. **How fast**
2. **The effect of temperature**
3. **Collision theory & Surface area**
4. **The effect of concentration and pressure**
5. **The effect of a catalyst**
6. **Energy & reversible reactions**
7. **Equilibrium (HT)**
8. **Equilibrium (HT)**
9. **Crude oil**
10. **Fractional distillation**
11. **Properties of hydrocarbons**
12. **Cracking & alkenes**
13. **Pure substance & formulations**
14. **Chromotography**
15. **Identification**
16. **The atmosphere**
17. **The atmosphere**
18. **Greenhouse effect**
19. **Carbon footprint**
20. **Atmospheric pollutants**
21. **Using earths resources**
22. **Potable water**
23. **Waste water treatment**
24. **Extracting metals (HT)**
25. **Life cycle assessment & recycling**