

## 4 Week 04

### 4.1 Key concepts

N/A

### 4.2 Important concepts

- Single impulse orbital change
- Hohmann transfer
- Hohmann transfer: case of small  $\Delta v$
- Orbital plane change
- In and out of plane and radial burns
- Strategies to reach GEO (incl. combined manoeuvre)

### 4.3 Relevant concepts

- One-tangent burn
- Lambert's problem
- Non-impulsive manoeuvre
- Earth viewed from space
- Apparent motion of satellite
- Orbit determination
- Two-line elements
- LEOP, station-keeping
- $\Delta v$  budget

### 4.4 Advanced concepts

- Oberth effect