## ELECTRICAL AND INFORMATION ENGINEERING



University of the Witwatersrand, Johannesburg Software Development II — Handout

## Design Advice: At a Class Level

## Exercise 1

```
class Flight {
2
     public:
3
       Flight(Aircraft plane,Place orig, Place dest);
       unsigned int GetMaxSpeed() const;
4
5
       void ScheduleTakeOff(const Time& time);
       Time GetFlyingTime() const;
6
       void AdjustFlightPath(Paths other);
7
8
       void AddPassenger(const Person& p);
       void RemovePassenger(const Person& p);
9
       vector<Person> GetPassengerList() const;
10
11
       Clearance SecurityCheckPassenger(const Person& p) const;
12
       unsigned int EstimateNoInflightMeals() const;
       void SetMealTypeAndNumber(MealType meal, unsigned int num);
13
       Rands TotalMealCost() const;
14
15 };
```

Flight is an example of a monolithic class. What are the different concerns that Flight deals with? Give just the names of smaller, more focused and cohesive classes that you could extract from Flight.