## **Programme Outline**

- Monday: Theory basics & overview
  - Raw material overview including conventional and new ones
  - Feed processing: Overview and raw material flow
- Tuesday Process focus
  - Raw material preparation: Particle size reduction, Mixing, Conditioning
  - Cooking and/or pellet shaping prcesses: Expander, Extruder, Pellet Press
  - Feed quality finalizing; Drying, infusion of liquid raw materials, Cooling
  - New technologies for new raw materials
- Wednesday
  - Demonstration in the pilot plant paricle size
  - New raw materials (e.g. algea, yeast, sustainabilty based on processing of new raw materials)
    - Effects of specific nutrients in some example animals (horse, pet food)
- Thursday
  - Demonstration in the pilot plant pellet shaping
  - New raw materials
    - the functional ones and their physiological effects case based lecture(s)
    - Healt aspects
    - Some examples
- Friday
  - Additives function on processability and nutrient availability
  - Raw materials Continuing of topic from Thursday

## Will be covered during the week

- Each PhDStudent present their topic 5 10 Minutes each
- Group work
  - Discussion about selection of new raw materials in both a technical and nutritional perspective
- Cases/Inspirations topics
  - The research Program «Foods of Norway» present their scope
  - Feed & genetics Is tailormaking diets to animal genetics the way?
  - Assessment of feed quality methodology and challenges a first step on the way to modelling?
- Tour/short excursions
  - <u>NMBU fish lab facility</u>
  - <u>NMBU land animal facility (the farm)</u>