## Building soil fertility through better rotations in combinable crops







Improve yield, and reduce costs • Improve farm profitability Reduce crop risk and build long term resilience

## Designed for:

Individuals who wish to build soil fertility to optimise crop yields, cost and margins through better rotation planning

Entry requirement:	An advanced course best suited to <b>accomplished</b> practitioners who want to implement the latest agri-tech research and knowledge on farm
Duration:	A one day classroom and field- based course
CPD points:	13 BASIS points; 2 NRoSO points

## Learning outcomes:

At the end of this course you will be able to:

- Identify the benefit of improved soil fertility and function
- Match cultivation and establishment methods to the farm system
- Account for practical, agronomic and economic aspects of rotations
- Build fertility and soil organic matter (including different soil amendments, straw incorporation and cover crops)
- Use key indicators such as worms as a measure of system performance and soil fertility
- Take decisions on the use of cover crops and soil amendments based on their effect on soils, yield and margins

## Content:

**Classroom module 1** (half day) – Building rotational systems:

- An overview of soil function including the maintenance of soil structure, the need for fertility and the value organic matter/types of organic matter
- The advantages and disadvantages of different methods of cultivation and establishment in arable systems
- Matching establishment systems to crops and specific farm scenarios
- Building arable rotations the structure of crop rotations and how rotational intensity can impact on performance, e.g. in oilseed rape
- Rotational performance using long term data sets from large scale arable rotation studies to consider agronomic constraints and practical considerations as well as yield, cost and margin

**Classroom/field module 2** (half day) – Building system fertility:

- Why we need fertility and the approaches that can be used to build fertility and organic matter in arable systems
- The use of different soil amendments (similarities, differences and impacts)
- The value and benefits of straw incorporation in arable systems
- Cover crops the process for choosing the right option and other aspects that need to be considered
- Key soil indicators structure, worms and assessment
- Case studies of the performance of cover crops and soil amendments in long term projects – quantifying impacts on soils, yields and margins



Nathan Morris, Farming Systems and Soils Specialist, NIAB TAG

SW05

Soil and

Water

For more information or to book online go to www.artistraining.com

01223 342444 info@artistraining.com

🔰 @ARTIStraining

ARTIS is managed by **NIAB**