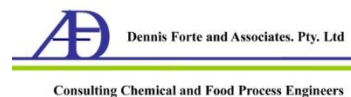




# Food drying technology short course

## Program<sup>1</sup>



**Tuesday 20<sup>th</sup> February 2024 – Day 1**

---

### **8.30 am Welcome and introduction**

8.45 am	Dried products and their quality	Dennis Forte, Dennis Forte & Assoc
9.20 am	Drying systems used in the food industry	Dennis Forte, Dennis Forte & Assoc

### **10:00 am Morning Break**

10.20 am	Basic drying theory	Dennis Forte, Dennis Forte & Assoc
11.10 am	Water activity: Basic concepts & sorption/desorption isotherms, methods of measurement	Dennis Forte, Dennis Forte & Assoc

12.00 pm TBC

### **12.15 pm Lunch**

12.45 pm	Water activity: relevance to food stability and the drying process	Dennis Forte, Dennis Forte & Assoc
1.30 pm	Principles of mass and energy balances as applied to drying processes (Exercise: Using mass and energy balance techniques to analyse simple drying system)	Dennis Forte, Dennis Forte & Assoc

### **2:30 pm Afternoon break**

2.50 pm	Principles of psychrometrics, tracing a drying process on a psychrometric chart	Dennis Forte, Dennis Forte & Assoc
3.30 pm	Mass & energy balance applied to a more complex drying system : A case study	Dennis Forte, Dennis Forte & Assoc
4.15 pm	Dryer Performance Comparison: Mass & Energy Balance	Dennis Forte, Dennis Forte & Assoc

### **4.45 pm End of day 1**

---

1. The following program may be subject to minor change

## Wednesday 21<sup>st</sup> February 2024 – Day 2

---

<b>8.15 am</b>	<b>Start of day 2</b>	
8.15 am	Modelling the drying curve (practical measurement/modelling of product drying curve and how it can be used)	Dennis Forte, Dennis Forte & Assoc
9.00 am	The use of dimensional analysis to optimise a drying process (an industry case study)	Dennis Forte, Dennis Forte & Assoc
<b>09.45 am</b>	<b>Morning break</b>	
10.05 am	Specialised drying systems	Darren Gardiner and Henry Sabarez, CSIRO
11.00 am	Clextral innovative drying technology	Gaetan Charley, Clextral Pacific
11:15 am	<i>Pilot plant visit</i>	
<b>12.15 pm</b>	<b>Lunch</b>	
12:45 pm	<b>Option 1:</b> Case studies of a range of drying technologies (fluidised bed, heat pump, vacuum/freeze) Dennis Forte, Dennis Forte & Assoc and Henry Sabarez, CSIRO	<b>Option 2:</b> Spray drying technology Darren Gardiner, CSIRO
<b>2:30 pm</b>	<b>Afternoon break</b>	
2:45 pm	Improving efficiency of established drying processes – a case study	Dennis Forte, Dennis Forte & Assoc and Henry Sabarez, CSIRO
3:30 pm	Drying Process – economic analysis	Dennis Forte, Dennis Forte & Assoc
<b>4:00 pm</b>	<b>Course close</b>	

---