

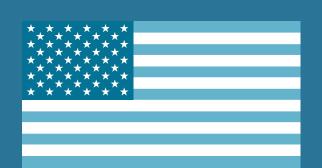
# SAFT USA 2017 SYLLABUS

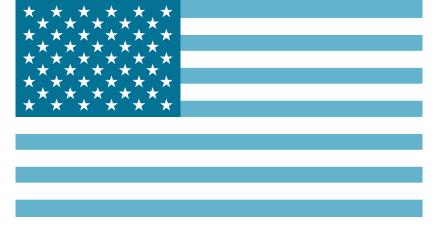
The SAFT (SATRA Accredited Footwear Technologist) award is an internationally recognized qualification, and is clear evidence that you are a footwear technologist with a proven range of knowledge. You will receive the most comprehensive and up-to-date information in six key areas of footwear manufacture. Each module is led by a SATRA specialist and covered in detail during two days' intensive training including comprehensive documentation.

Successful modern manufacturing processes rely on accurate practical information and the ability of staff to understand and apply such information. In a global and competitive marketplace, knowledge and skills are increasingly important. SATRA has designed this training course for all technologists involved in any aspect of footwear production.

#### **Accreditation**

Once the course is complete, SATRA will notify you of the next opportunity to take optional written examinations. You must obtain a pass in five of the six modules if you wish to receive a SAFT accreditation. You do not need to take all five examinations at one time, but you must obtain passes in all the papers within two years to obtain accreditation.





## SAFT USA 2017

OCTOBER 9TH - 24TH 2017

#### Module 1: Lasts, fitting and comfort – 18th & 19th Oct 2017

This module will focus on footwear from the customers' perspective – what they expect from their shoes in terms of fit and comfort, and how the manufacturer can satisfy these expectations, and thus maximize sales and develop brand loyalty.

Module 1 will cover:

- the foot: structure, function and foot health
- biomechanics (how we walk): gait cycle
- comfort factors: cushioning and sweat management
- shoe size systems: UK/USA, Euro, Mondopoint
- lasts: design, construction and shape assessment
- fit assessment: method and analysis.

#### Module 2.1: Materials – 11th Oct 2017

This module looks at the key materials and components used in footwear. Starting with leather, various different animal types are reviewed, including bovine, sheep and goat, and some of the less common varieties. It considers the structure of leather and how this affects its properties and aesthetics. Also, the various stages of the tanning process and tanning types are explained.

Different types of synthetic uppers are covered, with this module describing the structure of PUCFs, PVCFs and synthetic suedes, and the key properties of these materials. Woven and knitted textiles and their basic structures are also examined.

The key characteristics of a wide variety of soling materials are explained. This includes their relative performance properties, as well as an overview of their manufacture and suitability for different footwear types.

Key footwear components are discussed, including the most common types of insole and box toe/counter materials.

Other components are also reviewed, such as slide fasteners, touch and close fasteners, elastics, and threads.

#### Module 2.2: Constructions – 23rd Oct 2017

Module 2.2 looks at the six main constructions in use today, as well as some of the less well-known types. It considers the manufacturing processes used within the factory, the

sequence of operations, terminology and machinery. Also described are the advantages and disadvantages of each construction, and how combinations of different constructions can be used to meet the customers' requirements.

The practical examination of different construction types is a key part of this module.

#### Module 3: Testing - 9th & 10th Oct 2017

This module starts with a discussion on 'what is testing?' and 'why is testing important?' Also examined are the use of specifications, the importance of accurate and detailed test reports and the use of standard test methods and the correct test result units.

The next part of the module is an overview of the key tests which are carried out on footwear and materials. This includes:

- upper and lining materials, solings, footwear components and whole shoe tests
- a description of each test, including the equipment used, test piece preparation and the types of results which are produced
- comparisons of different methods for the same property, highlighting the advantages and disadvantages
- support for the methods under discussion, with examination of test pieces and, when training is on-site at SATRA's premises, a tour of the laboratory.

#### Module 4.1: Product design – 20th Oct 2017

The product design module looks at the process and what affects the creation of footwear. During the course, the delegate will tape up a last, flatten the shell and produce inside, outside and mean formes. From this mean forme, a set of shoe patterns will be produced – including adding allowances.

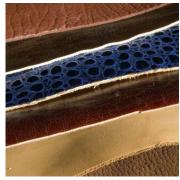
During this 'hands-on' day, the various methods of grading patterns will be explained. Delegates will produce their own examples of graded patterns.

Also covered will be the process of shoe costing, examining the way materials, labor and expenses are calculated to produce a final selling price.









#### Module 4.2: Lean manufacturing – 24th Oct 2017

This module looks at all aspects of lean manufacturing, covering implementation and techniques involved:

- lean manufacturing definition and aims
- added value/non value-added
- pattern engineering
- methods of assessing leather usage
- shoe sizing/grading
- stitching efficiency and ergonomics
- shoe costing
- cell/team working push/pull systems
- poka yoke (detecting and preventing errors/rejects)
- process activity mapping
- key performance indicators (KPIs)
- free ideas Kaisan.

### Module 5 Risk assessment and quality assurance – 12th & 13th Oct 2017

This module reviews risk assessment associated with product liability when the footwear fails or causes injury (or damage to property) in wear. The importance of risk management is discussed, including the impact of consumer legislation and product liability issues on the supply of consumer goods. The customer's expectations and marketing claims are also considered.

Risk identification and risk analysis are highlighted in this module, which also features practical exercises in assessing the risks of specific footwear items. The session also looks at some of the most important performance-related issues associated with product liability, including slip resistance, heel attachment, sole bonds, and issues affecting foot injuries, such as allergies and fit.

The second part will provide participants with an understanding of the purpose, organization and content of a quality management system, and an appreciation of how to apply this to their own company needs.

It will also give an understanding of the factors affecting the choice of a supplier, the implications for the resourcing company and assessment of a supplier's manufacturing plant. It covers the requirements of ISO 9001 and basic auditing against this particular standard.

Depending upon the location of the course, a practical audit may be undertaken.

#### Module 6: Industrial footwear – 16th & 17th Oct 2017

This industrial footwear module will describe the requirements of all the major industrial footwear specifications and standards – EN ISO 20345, ASTM F2412, and CSA Z195. It will contrast and compare the various requirements, such as impact resistance and slip resistance. Common faults and failures will be reviewed, as well as the precautions to be taken to avoid this happening.

An explanation of current legislation outlining the requirements of the different markets will be included – for example, how a technical file is prepared in order to satisfy the requirements of the European Personal Protective Equipment (PPE) Directive.

#### SAFT course costs (quoted in British pounds)

There is a variable cost per module, depending on how many modules the delegate attends. If someone attends just one module, the cost will be GBP 1125 (1 x GBP 1125). If a delegate attends all 6 modules, the cost will be GBP 5,250 (6 x GBP 875).

1 or 2 modules: GBP 1125 per module 3 modules: GBP 1000 per module 4 modules: GBP 945 per module 5 or 6 modules: GBP 875 per module

However, modules 2 and 4 consist of two separate parts and so a delegate may attend only one of the days. Therefore, the cost would be as the example below:

Example 1 – A delegate takes 2 half modules – that would count as one module and be GBP 1125.

Example 2 – A delegate attends 3  $\frac{1}{2}$  modules, this would count as 4 modules and the cost would be (3 x GBP 945 + a  $\frac{1}{2}$  module at GBP 482.50) = GBP 3,307.50.

#### **SAFT** examinations

After completing the modules, the delegate may take the examinations to gain SAFT accreditation.

Examinations are held twice a year (normally in February and August), and can be at either SATRA UK or at mutually agreed locations around the world.

To gain the accreditation, the delegate must take examinations in five out of the six modules (including the core modules) at a cost of 95 GBP per module.

#### Core modules

Module 1: Lasts, fitting and comfort
Module 2: Materials and constructions

Module 5: Risk assessment/quality assurance

## BOOKING DETAILS

#### **CUT-OFF DATE FOR ACCEPTING BOOKINGS IS 31 AUGUST 2017**

Tel: 011	Denise McAllister 011 44 1536 410000 011 44 1536 313307 training@satra.com	From –	Delegate name(s):
			Company name:
Tick as appl	licable		Company address
Module 1	<ul> <li>Lasts, fitting &amp; comfort</li> </ul>		
Module 2.1	- Materials		
Module 2.2	<ul> <li>Constructions</li> </ul>		
Module 3	<ul><li>Testing</li></ul>		Tel:
Module 4.1	<ul> <li>Product design</li> </ul>		Email:
Module 4.2	<ul> <li>Lean manufacturing</li> </ul>		
Module 5	<ul> <li>Risk assessment</li> </ul>		
	and quality assurance		Special dietary requirements:
Module 6	<ul> <li>Industrial footwear</li> </ul>		
By booking a place on this course you are agreeing to SATRA's terms and conditions (see below).			
Payment methods:			
□ SATRA vouchers: Please quote voucher numbers:			
□ Bank transfer to: SATRA Technology Centre Ltd - Account number 43898319, Sort code 53-61-33, BIC/SWIFT NWBKGB2L, IBAN GB81NWBK53613343898319 (Natwest Bank, 16 High Street, Kettering NN16 8SX)			
☐ Credit card: Please debit my VISA ☐ MASTERCARD ☐ AMERICAN EXPRESS ☐ All credit card payments will incur a processing fee as follows: Visa/Mastercard 2.5% and American Express 3.5%			
FOR SECURITY REASONS CREDIT CARD DETAILS MUST NOT BE SENT VIA EMAIL			
Please telephone SATRA's accounts department on 011 44 1536 410000 or fax the completed form to 011 44 1536 313307.			
Card number:			
Valid from:/ Expiry date:/ Issue number (if shown):			
Security code (last three digits on signature strip on back of card):			
Cardholder's name:			
Card statement address (including zipcode):			
Cardholder's signature:			

Cancellations: All cancellations must be made in writing to the address above no later than 21 days prior to the event, whether this be a course, seminar, conference or some other event for which SATRA charges a fee. An administration fee of GBP 25 will be charged. All cancellations after this will be charged 50% of the event fee. No cancellations can be accepted within ten days of the event and the full event fee will be charged. A suitable alternative delegate can be nominated up to two days before the event. SATRA Technology Centre reserves the right to make alternations to the programme, location or speakers without prior notice and to cancel the event with 7 days notice without any liability.