WorldSkills Occupational Standards (WSOS)

Occupation description and WSOS

The name of the occupation is

Cooking

Description of the associated work role(s) or occupation(s)

The professional chef can work in a wide range of establishments including high-class and casual restaurants, hotels, welfare caterings such as hospitals and residential homes, theme parks, airlines, ships, clubs, retail HMR and Food To-Go, Fast Food outlets, and industrial canteens; providing catering services to both guests and staff. The range of skills and customer expectations will vary according to the workplace. There is also a direct relationship between the nature and quality of the service provided and the payment made by the customer.

The professional chef can also deliver different styles of dining such as fine dining, banqueting, casual dining, cocktail dining, canteen and take-away dining, as well as different styles of food service including plated, à la carte, and set menu service, buffet self-service, silver service, canteen counter service, and breakfast service. As well as the skill of cooking, the role of a chef will also demand further skills that relate to cooking in a commercial setting and therefore working towards a budget or expected profit margin. These skills include menu compilation, food costing, purchasing, storage, utilization of food commodities and minimizing wastage, as well as the control, work/time organization, planning, and communication required in managing a kitchen brigade.

Professional chefs need to demonstrate outstanding skills in food preparation (with both speed and accuracy), in production (using varied cooking methods and techniques) and in the final presentation and flavour. They are expected to create and adapt dishes that meet the expectations of demanding customers with varying nutritional and religious dietary requirements. Fashions and trends in cuisine also fluctuate, so it is important that the professional chef keeps abreast of these trends and adapts their product and service accordingly. The professional chef needs to be adept at managing food cost and maintaining environmentally-friendly sustainable food production by making use of locally sourced and seasonal ingredients, as well as controlling unnecessary waste by creatively re-using trimmings and reducing ingredient wastage.

Strict maintenance of the highest level of personal and food hygiene and safety are paramount at all times. Failure to fulfil this requirement can have a devastating impact on a diner’s health and well-being, and may cause irreparable damage to the restaurant’s reputation and business.

Commercial kitchens are equipped with complex specialist equipment that must be used carefully to avoid accident and injury. Kitchens are potentially dangerous places to work. Staff work under intense pressure, often in a confined space, working with hot food and dangerous tools and equipment.

Effective communication skills are essential for the chef. A professional kitchen is a high-pressure environment where teams of chefs specializing in various aspects of the menu work together to produce the entire meal. Coordination of the kitchen brigade is essential to quality assure the dishes being sent to the restaurant and to meet very tight service time frames. In addition, the kitchen team need to work effectively with other departments in the hotel or restaurant to ensure a good overall experience for the guest. - A customer is expecting a memorable meal experience which incorporates the setting and ambiance of the restaurant, staff interaction, and outstanding customer care, as well as exceptional food.

With the globalization of cuisine, chefs can work all over the world. Talented chefs are always in demand and have opportunities to travel and work in some of the most interesting and exciting international destinations.
This carries with it the need to appreciate diverse cultures, especially with regard to using locally available ingredients, and observing local dietary requirements and traditions.

**General notes on the WSOS**

The WSOS specifies the knowledge, understanding, and specific skills that underpin international best practice in technical and vocational performance. It should reflect a shared global understanding of what the associated work role(s) or occupation(s) represent for industry and business (www.worldskills.org/WSOS).

The skill competition is intended to reflect international best practice as described by the WSOS, and to the extent that it is able to. The Standard is therefore a guide to the required training and preparation for the skill competition.

In the skill competition the assessment of knowledge and understanding will take place through the assessment of performance. There will only be separate tests of knowledge and understanding where there is an overwhelming reason for these.

The Standard is divided into distinct sections with headings and reference numbers added.

Each section is assigned a percentage of the total marks to indicate its relative importance within the Standards. This is often referred to as the “weighting”. The sum of all the percentage marks is 100. The weightings determine the distribution of marks within the Marking Scheme.

Through the Test Project, the Marking Scheme will assess only those skills that are set out in the Standards Specification. They will reflect the Standards as comprehensively as possible within the constraints of the skill competition.

The Marking Scheme will follow the allocation of marks within the Standards to the extent practically possible. A variation of up to five percent is allowed, provided that this does not distort the weightings assigned by the Standards.
WorldSkills Occupational Standards

<table>
<thead>
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<th>Section</th>
<th>Relative importance (%)</th>
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<td>Work organization and management</td>
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The individual needs to know and understand:

- All internal business regulations
- The organization and structure of the hospitality and restaurant service industry
- The importance of effective teamwork
- The use and care of speciality tools used in gastronomy
- The role of the professional chef in producing menus and dishes in a business environment
- The importance of continuing professional development to maintain knowledge of current trends and fashions within culinary arts
- How to plan a well-balanced menu for a range of occasions and situations and within given restrictions and budgets

The individual shall be able to:

- Maintain quality standards throughout production, even when under pressure
- Prepare work plans for single dishes and plan schedules for the preparation of a menu. Plan daily work for self and others
- Co-ordinate all preparatory tasks (mise-en place) prior to service
- Prioritize work to differentiate important issues from less important ones
- Optimize workflow
- Function effectively in every area of the kitchen
- Account for time and staff resources
- Detect conflicts, address them and find solutions with the team
- Apply environmentally sustainable energy saving practices when using cooking equipment
- Operate all commercial kitchen equipment and technology properly and safely
- Apply legal requirements for the description and sale of menu items
- Be responsive and flexible to unforeseen situations
- Adapt working methods to given situations and be an effective member to the team
- Make suggestions for improvement of operational procedures
- Create and adapt recipes with own ideas and develop them further
- Demonstrate a feel and understanding of ingredients and be able to create dishes without recipes
- Treat all goods with respect and apply sustainable economic resourcefulness
- Judge personal performance ability and avoid unnecessary stress
- Set goals independently and achieve them
- Take personal responsibility for own continuing professional development
### Section 2: Customer Service and Communications

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The individual needs to know and understand:

- The characteristics of different types and styles of food service and when each would be appropriately used
- The impact on food production of the various types of food service
- The importance of the menu as a sales and communication tool
- Legal requirements and restrictions on promotional materials and menu presentation
- The importance of appearance when on public view and dealing with customers
- The importance of effective communication within the team, with customers and contractors

The individual shall be able to:

- Pay attention to own cleanliness, personal hygiene, and professional appearance (including dress code) at all times
- Pay attention to work area cleanliness and appearance at all times
- Communicate effectively with colleagues, teams, and customers
- Make use of a menu as a sales and communication tool
- Check dishes produced match the menu description
- Apply appropriate food service styles to the situation and clientele
- Place customer service at the heart of decision-making and activities
- Provide advice and guidance on culinary matters to management, colleagues, and customers
- Propose solutions and discuss with goal orientated attitude, arriving at agreed solutions
- Plan and implement meal promotions
- Plan and implement timings for service delivery

### Section 3: Food Hygiene and Health, Safety, and Environment

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The individual needs to know and understand:

- Legislation and good practice relating to the purchase, storage, preparation, cooking, and service of food
- Legislation and good practice for safe working practices in a kitchen and for using commercial catering equipment
- The causes of deterioration of food
- Quality indicators for fresh and preserved foods
The individual shall be able to:

- Work hygienically and practise hygienic food tasting procedures
- Maintain clean, neat, and tidy workstation, storage, and waste areas
- Practise food safety during storage, preparation, cooking, and service (HACCP principles are applied)
- Prevent cross-contamination, fridge drip-contamination and time-temperature abuse
- Store all food items contained, covered, labelled, and dated
- Store all non-food commodities, tools, and equipment safely and hygienically
- Ensure all equipment and work areas are cleaned to the highest standards
- Work safely and uphold accident prevention regulations
- Use all tools and equipment safely and according to the manufacturer’s instructions
- Promote health, safety, and environment and food hygiene within the working environment

### 4 Ingredients and menu development

The individual needs to know and understand:

- Market prices for ingredients and the correlation between price and quality
- The nature and types of ingredients used in cookery
- Product seasonal availability and value
- The correlation between product quality, menu sophistication, and gastronomic level
- The nutritional properties of ingredients
- The physical nutritional impact of cooking methods
- Import regulations and restrictions that apply to some ingredients
- Types and styles of menu
- Balance in menu compilation
- Issues surrounding sustainability and ethics when sourcing ingredients
- The impact of culture, religion, allergies, intolerances, and tradition on diet and cooking
The individual shall be able to:

- Advise on procurement of ingredients and equipment
- Select appropriate product quality standards for menus, budgets, and situations
- Recognize and comply with ingredient labelling
- Apply nutritional principles in order to comply with guests’ expectations and requirements
- Identify the quality state of ingredients and recognize the signs of quality and freshness, e.g. appearance, aroma, structure, etc.
- Appraise and reject sub-standard goods
- Select appropriate products for speciality meals
- Compose menus for a variety of situations and occasions
- Be accurate in menu preparation and account for obligatory declarations such as dietary and allergy information
- Compile menus for a variety of occasions and settings

5 Preparation of ingredients

The individual needs to know and understand:

- The importance of using environmentally sustainable and locally sourced meat, poultry, game, offal, seafood, eggs, dairy, fruit, and vegetables currently in season.
- The importance of ordering and preparing only what is needed to produce sufficient output for a menu
- The structure of a carcass and whole poultry or game bird
- Methods of butchering and preparing meat for cooking with minimal wastage
- The range of meats, game, and poultry and their best uses
- Cuts of meat, poultry and game commonly used in cookery and the re-use of wastage and trimmings
- The range of offal and their suitable uses
- The range of fish and shellfish available and their suitable uses
- Cuts of fish used in cookery, and the re-use of wastage and trimmings
- Methods of preparing fish and shellfish for cooking
- Methods of preparing and using eggs
- The range of dairy products available and their suitable uses and re-uses
- The range of fruits, salad ingredients, and vegetables available, their methods of preparation and the re-use of wastage and trimmings
- Accepted vegetable cuts and their uses
- The methods of making stocks, soups, and sauces and their uses
- The methods of making pastry, bakery products, and desserts
- The methods of making pasta and other farinaceous products
- The equipment and tools used in butchery, fishmongery, and the preparation of ingredients
- The safe use and care of tools, especially knives
- The separation of waste for recycling and composting
The individual shall be able to:

- Make environmentally sustainable choices and use locally sourced meat, poultry, game, offal, seafood, eggs, dairy, fruit, and vegetables currently in season.
- Order and prepare only what is needed for producing sufficient output for a menu.
- Calculate, measure, and weigh correct amounts of products.
- Apply excellent knife skills and common cutting techniques.
- Debone meat, poultry and game cuts and prepare for further processing, and re-use any wastage and trimmings.
- Trim and tie meats, poultry, and game.
- Prepare, portion, and fillet meat, poultry, and game cuts.
- Prepare offal.
- Prepare whole fish for further processing - scale, remove entrails, fillet, and re-use any wastage and trimmings.
- Prepare accepted portions of fish for further processing and cooking.
- Prepare shellfish.
- Prepare and use eggs.
- Prepare and use dairy products.
- Prepare fruits, salad ingredients, and vegetables.
- Prepare stocks, soups, sauces, marinades, accompaniments, and dressings.
- Plan and assemble the mise en place for the menu in its entirety with minimal wastage.
- Re-use and utilize unused wastage, trimmings, and mise en place for other applications.
- Make preparations for the production of pastry, bakery products, and desserts.
- Produce a variety of pasta and other farinaceous items.
- Separate waste for recycling and composting.

6 Food production and application of cooking methods

The individual needs to know and understand:

- The range of wet, dry, and non-thermal cooking methods available and their appropriate uses for various ingredients and menus.
- The effects of cooking on ingredients.
- The assembly of dishes for cold food presentation and cold desserts.
- Types of hot and cold sauces used in professional cookery and the methodology for making sauces.
- Types of hot and cold soups used in professional cookery and the methodology for making soups.
- Classic garnishes and extensions to basic dishes.
The individual shall be able to:

- Select the appropriate cooking equipment for each cooking method
- Apply correct cooking methods for each ingredient and dish
- Apply a full range of cookery methods, maximizing the freshness and nutritional value of the ingredient
- Monitor cooking times and temperatures so as not to dry out, overcook or burn anything
- Combine and apply various cooking methods simultaneously
- Account for shrinkage during cooking
- Follow recipes, adapting them as necessary, and calculate ingredients based on covers required
- Combine ingredients and assemble dishes to achieve the required result for cold food presentation and cold desserts
- Produce a wide range of dishes including:
  - Soups and sauces (either hot and/or cold);
  - Starters (either hot and/or cold);
  - Salads and hors d’oeuvres;
  - Fish and shellfish dishes;
  - Meat, poultry, game and offal dishes;
  - Vegetable and vegetarian dishes;
  - Speciality and international dishes;
  - Rice, pasta and farinaceous dishes;
  - Egg dishes
  - Pastry, bakery products, sweets, and desserts
- Prepare and cook complex dishes combining ingredients to produce interesting and innovative dishes with various flavours and textures (including hot, cold, crisp, soft, moist, dry)
- Prepare and cook various ingredients to the required point of doneness
- Prepare regional, national, and international dishes using recipes
- Prepare and cook dishes for a range of meals including breakfast, lunch, afternoon tea, high tea, and dinner
- Apply modern technologies and methodologies in food production
7 Presentation of dishes

The individual needs to know and understand:

- The importance of the presentation of food as part of the meal experience
- The range of servicing dishes, plates, and other presentation equipment available
- Trends in food presentation
- Styles of food service and their impact on the presentation of dishes
- Acceptable garnishes and accompaniments for traditional dishes
- The importance of clean plating, clean slicing, and precision of technical skills in visual presentation with balance of colour and harmony of ingredients.
- The importance of plate replication and portion control in commercial restaurants and catering operations
- The importance of nutritional balance and maximizing the freshness and nutritional value of the ingredient

The individual shall be able to:

- Portion the components in the required yield and replicate portions, ingredients, and garnishes across all plates
- Produce harmony of ingredients, colours, preparation methods and plating techniques
- Display complex techniques and technical skills in the dish presentation
- Present cold plates and assorted salads
- Present food items for hot and cold buffets and self-service settings
- Prepare acceptable edible garnishes and use them for the effective presentation of dishes
- Adjust preparation and plating styles to service methods
- Taste dishes and apply seasonings, herbs, and spices to achieve a balanced flavour of taste and aroma
- Present food attractively to enhance the meal experience and customer appreciation of the food
- Present food using service equipment such as flat plates, tureens, dishes, etc.
- Present plated dishes on appropriate service plates or dishes to provide an attractive and pleasing appearance
### Food purchase, storage, costing, and control

The individual needs to know and understand:
- Seasonal availability and price variations of ingredients
- The market process of common merchandise
- The range and advantages of local, national, and international suppliers
- Common payment and shipment conditions
- The process for ordering commodities and equipment
- The factors that influence the menu price
- The methods for calculating selling price based on ingredients’ cost
- The importance of economy and efficiency when preparing food
- The importance of sustainability, environmental impact, and the carbon footprint caused by their choices.
- Product solutions such as recipe programmes, menu, merchandise systems, banquet systems, etc.
- The food storage solutions available

The individual shall be able to:
- Select suppliers based on quality, service, range, and price
- Prepare daily requisitions
- Accurately select/order required food and consumable items to meet the needs of the business
- Secure best prices, service, and quality from suppliers
- Complete purchase orders and submit on-line purchase orders on time
- Receive goods and ensure that the delivery quantity is correct and that the goods are correct and of acceptable quality.
- Check the delivery documentation against the order documentation for any variations.
- Store all fresh, frozen, chilled, and ambient food items correctly, ensuring that appropriate storage temperatures and conditions are maintained, and that all products are suitably covered, labelled, and dated.
- Account for storage losses
- Estimate cost of storage
- Align purchase orders with storage capacity
- Complete ordering, control, and stock records manually or by the use of IT
- Calculate material costs and selling prices to reach required kitchen profit
- Monitor and adapt food production and portion control to maintain required profit margins
- Control wastage by correctly estimating preparation quantities required and by not over-ordering

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<td>10</td>
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| Total | 100 |
References for industry consultation

WorldSkills is committed to ensuring that the WorldSkills Occupational Standards fully reflect the dynamism of internationally recognized best practice in industry and business. To do this WorldSkills approaches a number of organizations across the world that can offer feedback on the draft Description of the Associated Role and WorldSkills Occupational Standards on a two-yearly cycle.

In parallel to this, WSI consults three international occupational classifications and databases:

- ISCO-08: (http://www.ilo.org/public/english/bureau/stat/isco/isco08/) ILO 3434
- ESCO: (https://ec.europa.eu/esco/portal/home)
- O*NET OnLine (www.onetonline.org/

This WSOS appears most closely to relate to Cooks, Restaurant: https://www.onetonline.org/link/summary/35-2014.00

and Chefs:
http://data.europa.eu/esco/occupation/1009be17-7efd-45f1-a033-566bf179c588

The following table indicates which organizations were approached and provided valuable feedback for the Description of the Associated Role and WorldSkills Occupational Standards in place for WorldSkills Shanghai 2022.

<table>
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<tr>
<th>Organization</th>
<th>Contact name</th>
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<tbody>
<tr>
<td>Hotel and Gastro formation Switzerland</td>
<td>Jean-Claude Schmocker, Head Education Marketing/Projects</td>
</tr>
<tr>
<td>Pullman Bangkok King Power - Accor</td>
<td>Ulhas Shetty, Director of Operations</td>
</tr>
<tr>
<td>The South African Chefs Association - SACA</td>
<td>Elsu Gericke, Head of Education</td>
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<tr>
<td>YOSH Hospitality (United Arab Emirates)</td>
<td>Alan Pedge, Food and Beverage Manager</td>
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